١,

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                     n
                                                                                                                                                                        O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   on:
                                                 9
10
11
12
13
13
14
14
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           núcleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match
    US-09-996-630A-11_COPY_1_400
400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                January 31, 2005, 09:45:33; Search time 2226.25 Seconds (without alignments) 8496.727 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4526729 segs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenEmbl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gtctaaagagtgtaaagacc.....ccaaaattgatgtaccccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gb_pl:
gb_pr:
gb_sr:
gb_sr:
gb_sr:
gb_sr:
gb_vi:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gb_pat:*
                       4882
5140
4708
3004
3004
3101
3248901
143034
116485
116485
1160170
116485
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
11664
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
116645
11664
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) om: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07:
                                                          5 AX329586

6 CQ722611

6 AX66529

6 AX642970

9 HUMKIAAQ

9 BC071567

10 AF387809

10 RUSNF1KIN

10 BC020189

2 AC118087

9 AC118087

9 AC118088

2 AC143769

10 AC121264

10 AC120394
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9053458
AX329586 Sequence
CQ725611 Sequence
AX166529 Sequence
AX642970 Sequence
AX642970 Sequence
D43636 Human mRNA
AF226044 Homo sapi
BC071567 Homo sapi
BC071567 Homo sapi
BC071867 Rattus no
AC104184 Homo sapi
AC138808 Homo sapi
AC138808 Homo sapi
AC13769 Macaca muscu
AC121264 Mus muscu
AC121264 Mus muscu
AC120394 Mus muscu
AC120394 Mus muscu
AC120394 Mus muscu
AC120394 Danio rer
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
```

ი		ი	ი		ი	Ω	a		Ω	Ω		ი		ი						O			ი	
45	44	43	42	41	40	39	38	37	36	υ 5	34	33	32	31	30	29	28	27	26	25	24	23	22	21
41.8	41.8	42	42	43	43.2	43.2	43.2	43.2	46.4	46.4	50	54.2	54.2	54.2	65.4	72.6	72.6	72.6	76.6	80.6	100.2	104.4	104.4	104.4
10.4	10.4	10.5	10.5	10.8	10.8	10.8	10.8	10.8	11.6	11.6	12.5	13.6	13.6	13.6	16.4	18.1	18.1	18.1	19.1	20.1	25.1	26.1	26.1	26.1
104128	4215	157009	146458	158574	152883	145772	144337	131711	157974	128326	51	229053	157076	149790	534	3172	2969	2860	199086	136547	546	229053	157076	149790
10	10	œ	N	8	œ	œ	œ	N	œ	æ	9	N	9	9	σ	ω	w	σ	N	N	ø	N	9	9
AL929562	BC049083	AC137748	AC134346	AP003763	AC084319	AP004269	AP005320	AP003954	AP003755	AP003756	CQ001589	AC010309	AC010441	AC022106	BD168101	AY052073	AY095014	CQ590679	CR388073	AC134966	BC038539	AC010309	AC010441	AC022106
AL929562 Mouse	BC049083	AC137748	AC134346	AP003763	AC084319	AP004269	AP005320	AP003954	AP003755	AP003756	CQ001589	AC010309	AC010441	AC022106	BD168101	AY052073	AY095014	CQ590679	CR388073	AC134966	BC038539	AC010309		AC022106
Mouse DNA	Mus muscu	Oryza sat	Sequence	Ното варі	Homo sapi	Ното варі	Method fo	Drosophil	Drosophil	Sequence	Danio rer	Gallus ga	Ното варі	Homo sapi	Ното варі	Ното варі								

ALIGNMENTS

## REFERENCE AUTHORS KEYWORDS SOURCE ORGANISM RESULT 1 AX329586 LOCUS DEFINITION ACCESSION á 밁 Ś 밁 S 윰 ORIGIN FEATURES VERSION Query Match 100.0%; Score 400; DB 6; 1 Best Local Similarity 100.0%; Pred. No. 2.7e-108; 0; Mismatches 0; JOURNAL TITLE source 181 121 121 61 61 --\_ Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using s Sequence 95 from Patent AX329586 Patent: WO 0194629-A 95 13-DEC-2001; Avalon Pharmaceuticals (US) Location/Qualifiers gene sets Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Homo sapiens (human) Homo sapiens AX329586.1 GI:18102564 AX329586 CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCCTGGA 240 AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGGAGCACAACAGCAT 180 AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGAGGAGCACAACAGCAT 180 TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC 120 GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC 60 TTCTTTAGAAGAGTTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC /organism="Homo sapiens" /mol\_type="unassigned DNA" /db\_xref="taxon:9606" 4165 bp WO0194629. DNA Length 4165; screening using signature Indels linear 0; PAT 09-JAN-2002 Gaps 120 60 0

O

AC106612 BC075868 BC060922

```
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
CQ722611
LOCUS
                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                δ
                                                           á
                                                                                   밁
                                                                                                   5
                                                                                                                             밁
                                                                                                                                                                                           Ś
                                                                                                                                                Ś
                                                                                                                                                                        밁
                                                                                                                                                                                                                 日
                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 399; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                    361
                                         909
                                                              301
                                                                                   849
                                                                                                                                                                                                                   669
969
                                                                                                       241
                                                                                                                              789
                                                                                                                                                  181
                                                                                                                                                                        729
                                                                                                                                                                                            121
                                                                                                                                                                                                                                                            609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 854
CQ722611
CQ722611.1
                                                                                                                                                                                                                                                                                 ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                            Venter, C.J., Adams, M.C., Li
Kits, such as nucleic acid
humanexons or transcripts,
                                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 02068579-A 8545 06-SEP-2002; PE Corporation (NY) (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Eukaryota; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                               CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                                   AAAGTATAACATTCCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCAT
                                                                                                                                                                                                                             TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                                                        GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAAAAGCAAGAGAAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                          GTCTAAAGAGTGTAAAGACCTAATCACACGGATGCTACAGAGAGATCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG 400
                                        AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                  CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                        AAAGTATAACATTCCCCTTGTGTCATACAAAATCTCTCGGAAGAGGAGCACAACAGCAT
                                                                                                                                                                                                                TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAAAGCAAGAGAAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2193 bp DN
8545 from Patent WO02068579.
                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:42283468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (human)
                                                                                                                                                                                                                                                                                                               99.6%;
                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                    Score 398.4; DB 6;
Pred. No. 7.9e-108;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Li, P.W. and Myers, E.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                            arrays, comprising for detecting expre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                              expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
1008
                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                              a majority
ession and o
                                                                                                                                                                                                                                                                                                                          2193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT
                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                               other uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-FEB-2004
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                         o
ff
                                                            360
                                                                                                      300
                                                                                                                            848
                                                                                                                                                                                            180
                                                                                                                                                                                                                                                          899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                  908
                                                                                                                                                 240
                                                                                                                                                                     788
                                                                                                                                                                                                                728
                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                         Ş
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
```

```
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                              RESULT 4
AX642970
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
AX166529
                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                            AUTHORS
                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                   1074
                                                                                                                                                                                                                                                                                      1014
                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                          954
                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                               894
                                                                                                                                                                                                                                                                                                                                                                                                                                                   834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          774
                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 TICTITAGAAGAGAITGAAAAICATCCITGGCTICAGGGAGTGGACCCITCACCAGCTAC
                                                                                                                                    AX642970
Sequence
AX642970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX166529
Sequence 20
AX166529
AX166529.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC
Yue,H., Lal,P., Bandman,O., Borowsky,M., Au-Young,J., Lu,Y., Gandhi,A.R., Tribouley,C.M., Walia,N., Yao,M.G., Lu,D.A., Greenwald,S.R., Ramkumar,J., Griffin,J.A., Kearney,L., Burfo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sugen,
                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; |
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                Homo sapiens
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plowman,G.D., Whyte,D., Manning,G.S., Sudarsanam,S.s Flanagan,P. and Clary,D.S.
Novel human protein kinases and protein kinase-like Patent: WO 0138503-A 20 31-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; |
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Homo sapiens
                                                                                                                        AX642970.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTTAGGCAGTCATGGCCAAACCAAAATTGATGTACCCCAG
                                                                                                                                                                                                                                                                                                                                          CATTCAGCGCATGGTGCTTGGGGACATAGCGGATTGGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                                                                                   GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG
                                                                                                                                                                                                                                                                                                        AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                           CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1. .2298
                                                                                                                                                  from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:14546874
                                                                                                                        GI:28550119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               from Patent
                                                                                              (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.6%;
                                                                                                                                                  Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 398.4; DB 6;
Pred. No. 7.9e-108;
0; Mismatches 1;
                                                                                                                                                  4772 bp
WO01096547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2298 bp
WO0138503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sudarsanam, S.S., Martinez
                                                                                                                                                                                                                                  1113
                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                     Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Euteleostomi;
; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT
                                                                                                                                                                 PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                 24-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-JUN-2001
                                                                                                                                                                                                                                                                                         1073
                                                                                                                                                                                                                                                                                                                                           1013
                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                               953
                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
```

Burford, N.,

```
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                          JOURNAL
                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ᆫ
2 (bases 1 to 4882)
Ohara, O., Nagase, T., Kikuno, R. and Nomura, N.
Direct Submission
Submitted (24-NOV-1994) Osamu Ohara, Kazusa DNA
1532-3, Yana, Kisarazu, Chiba 292-0812, Japan
                                                                                                                         Nagase, T., Miyajima, N., Tanaka, A., Sazuka, T., Seki, N., Sato, S., Tabata, S., Ishikawa, K.-i., Kawarabayasi, Y., Kotani, H. and Nomura, Prediction of the coding sequences of unidentified human genes. III. The coding sequences of 40 new genes (KIAA0081-KIAA0120) deduced by analysis of cDNA clones from human cell line KG-1 NA RES. 2 (1), 37-43, (1995)
                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                         D43636
D43636.2 GI:20521877
KIAA0096.
                                                                                                                                                                                                                                                                                                                                                                                               Human mRNA for KIAA0096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nguyen, D.B., Tang, Y.T., Baughn, M.R., He, A., Thornton, M., Hafalia, A., Patterson, C., Gururajan, R., Lo, T.P., Khan, F., Recipon, S.A., Azimzai, Y., Policky, J.L., Ding, L., Grether, M., Elliott, V.S., Thangavelu, K., Batra, S. and Ison, C.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 01096547-A 47 20-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Humain kinases
                                                                                                                                                                                                                                                                                                                                                                                                              HUMKIAAQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Incyte Genomics,
                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTTAGGCAGTCATGGCCAAACCAAAATTGATGTACCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAAAAGCAAGAAAAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCTAAAGAGTGTAAAGACCTAATCACACGGATGCTACAGAGAGATCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG 1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAAAGCAAGAGAAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .4772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="Incyte ID No: 063497CB1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 398.4; DB Pred. No. 8e-108; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SD)
                                                                                                                                                                                                                                                                                                                                                                                           4882 l
gene,
                                                                                                                                                                                                                                                                                                                                                                                           bp mRN
, partial
                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                               mRNA
Lal cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                linear
                         Research
                                                                                                                                                                                                                                                                                                                                                                                                                PRI 10-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                       Institute;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
```

밁

δ 밁

δ

S

밁 Ś 밁 S

ঠ ₽ ð 밁

8

```
COMMENT
FEATURES
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (E-mail:cdnainfo@kazusa.or.jp, Tel:+81-438-52-3913)
On May 9, 2002 this sequence version replaced gi:598957.
Location/Qualifiers
                                                    kinase."

/ codon start=2
// proteIn_id="BAA07744.2"
// proteIn_id="BAA07744.2"
// proteIn_id="BAA07744.2"
// proteIn_id="BAA07744.2"
// db_xref="GI:20521878"
// db_xref="GI:20521878"
// translation="SWAGFKRGYDGKIAGLYDLDKTLGRGHFAVYKLARHYFTGEKVA/translation="SWAGFKRGYDGKIAGLYCHIPUTCHYPTDLKEENVVFFEKQGLVKLTDFGYIMKHEEGLANDLAKKYFAQIVHAISYCHKLHVVHRDLKFENVVFFEKQGLVKLTDFGYIMKHEEGLANDLAKKYFAQIVHAISYCHLAGDEVDAADAUDIWSLGYILFMLYGGQPPFOE DYIMKHEEGLANDLAKKYFAQIHASSECHITAMLAGDFKRAASLEINLFGDEVDAADAUDIWSLGYILFMLYGGOPPFOE ANDSETLTMIMDCKYTVPFSHVSKECKDLITAMLGDLAGTWRAGSLEINLFDKYSTUFLAFTFSHTATVPOSP FATKYNIPLVSYKNLSSEEHNSIIQRMVLGDIADRAYSALKFTASGRKCLFRVEEDE EEDEBDKKPMSLSTQVVLRRKAGPRAGSWFTKLDVPOALLEDLTATFLSHATVPOSP ARAADSVLNGHRSKGLCDSAKKDDLFELAGPALSTVPPASLKFTASGRKCLFRVEEDE EEDEBDKKPMSLSTQVVLRRKSGVTNRLTSRKSAFVLNQIFEEGGSDDEFDNDENLPFKLRLMNIAAPGTVHKRYHRKSQGRGSSCSSETSDDDESSRRLDKDSGFTYSMH RRDSSEGPFGSEGGGGOSTNTSGTTRRCAGFSNSMOLASRSAGELVESIKLMSICLGSQLHGSTKYIIDPONGLSFSSVKYOE KSTWKMCISSTGNAGGVPAVGGIKFFSDHMADTTTELERIKSKNLKNNNVLQLPLCEKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cell_line="KG-1"
/cell_type="myeloblast"
/tissue_type="brain"
/clone_Tib="pBluescriptII SK plus"
/clone_Tib="pBluescriptII SK plus"
/note="This sequence was obtained by subcloning of the DNA fragments derived from two cDNA clones (1 - 1013 was derived from a RT-PCR product (Lung) and 1014 - 4882 was derived from ha01240)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="KIAA0096"
/note="KIAA0096 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="KIAA0096"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9606"
/clone="ha0124081"
                             (SVNIQRNPKEGLLCASSPASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . .4882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  product is related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein
```

```
S
                                    밁
                                                    ક
                                                                          밁
                                                                                           S
                                                                                                                  밁
                                                                                                                               5
                                                                                                                                                      문
                                                                                                                                                                        δ
                                                                                                                                                                                             밁
                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                            Matches
1078
                                    1018
                 361
                                                        301
                                                                          958
                                                                                              241
                                                                                                                  898
                                                                                                                                                        838
                                                                                                                                                                           121
                                                                                                                                                                                               778
                                                                                                                                                                                                                                    718
                                                                                                                                     181
                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                       -
                                                                                                                                                                                                                                                                                    Similarity
                                                 AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 360
                                                                                     CATTCAGCGCATGGTGCTTGGGGACATAGCGGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                       AAAGTATAACATTCCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCAT
                                                                                                                                                                   TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                    GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC
             GTTTAGGCAGTCATGGCCAAACCAAAATTGATGTACCCCAG 400
                                                                                                                 CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCCTGGA
                                                                           TTCTTTAGAAGAGTTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                   99.6%;
                                                                                                                                                                                                                                                                         Score 398.4; DB 9;
Pred. No. 8e-108;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                              4882;
                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                            Gaps
                                      1077
                                                                           1017
                                                                                                                  957
                                                                                                                                     240
                                                                                                                                                        897
                                                                                                                                                                           180
                                                                                                                                                                                                                120
                                                                                                                                                                                                                                     777
                                                                                                                                                                                                                                                       60
                                                                                                                                                                                               837
                                                                                                                                                                                                                                                                            0
```

```
S
                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                             밁
                                                                                                                                       밁
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
AF226044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Snoor
                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                               1475
  181
                                                                                            121
                                                                                                                                                                                  19
                                                                                                                                                                                                                                                       1 GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (19-JAN-2000) Chinese National Human Genome Center at Shanghai, 351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudom Shanghai 201203, P. R. China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AF226044
AF226044.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A novel gene expressed in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AF226044
Homo sapiens HSNFRK (HSNFRK) mRNA,
                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                       AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACCAACAGCAT 180
CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA 240
                                                                                                                                TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC 1474
                                                                                                                                                                 TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC
                                                                                                                                                                                                                            (bases 1 to 5519)
Y., Wu,T., Xu,S., Ren,S., Chen,Z. and Han,Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 5519)
Y., Wu,T., Xu,S., Ren,S.,
                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /Godon_start=1
/product="HSNFRK"
/product="HSNFRK"
/protein_id="AAR86944.1"
/protein_id="AAR86944.1"
/db_xref="GI:9295327"
/translation="MAGFKRGYDGKLAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
/VINHELDTLATGHLFQEVRCMKLVQHPNIVRLYEVIDTQTKLYLILELGDEGDMFD
YIMKHEBGLNEDLFKKYFAQI'NHAISYCHKLHVVHRDLKFENVVFTEKQGLVKLTDFG
FSNKFQPGKKLTTSCGSLAYSAPEILLGDEYDAFAUDIWSLGVILFMLVCGQPFFQEA
NDSETLIMIMDCKYTVPSHVSKECKDLITRMLQRDFKRASLEEIENHFWLQGYDFSB
NDSETLIMIMDCKYTVPSHVSKECKDLITRMLQRDFKRASLEEIENHFWLQGYDFSB
NDSETLIMIMDCKYTVPSHVSKECKDLITRMLQRDFKRASLEEIENHFWLQGYDFSB
NDSETLIMIMDCKYTVPSHVSKECKDLITRMLQRDFKRASLEEIENHFWLQGYDFSB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATKYNI PLVSYKNLSEEEHNS I I QRMVLGDI ADRDA I VEALETNRYNHI TATYFLLAE RILREKQEKEI QTRSASPSNI KAQFRQSWPTKI DVPQDLEDDI TATPLSHATVPQSPA RALDS VLNGHRSKGLCDSAKKDDL PELAGPALSTVP PASIKFTASGRKCLFRVEEDEE EDEEDKKPMSLSTQVVLRRKPSVTNRLITSRKSAPVLNQI FEEGESDDEFDMDENLPFK LSRLKMNI AS PGTVHKRYHRRKSQGRGSSCSSETSDDDSESRRRLDKDSGFTYSMHR RDSSEGPFGSEGDGGGQSKPSNASGGVDKASPSENNAGGGSPSSGSGGNPTNTSGTTR RCAGFSNSMQLASRSAGELVESLKLMSLCLGSQLHGSTKYI I DPQNGLSFSSVKVQEK
                                                                                                                                                                                                                                                                                                                                                                                                                                  STWKMCISSTGNAGQVPAVGGIKFFSDHMADTTTELERIKSKNLKNNVLQLPLCEKTI
SVNIQRNPKEGLLCASSPASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="HSNFRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue_type="adrenal gland"
|. .5519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="HSNFRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:9295326
                                                                                                                                                                                                                                                                                                                                            99.6%;
                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                            Score 398.4; DB 9;
Pred. No. 8e-108;
                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human adrenal gland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen, Z. and Han, Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhangjiang Hi-Tech Park, Pudong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA 1
complete
                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                      5519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRI 20-JUL-2000
                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                               120
                                                                                                                                                                                                                                                                          60
```

```
JOURNAL
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
BC071567
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strauberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Warusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S., M., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1595
Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 167 Row: b Column: 13
This clone was selected for full length sequencing because it
                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI) & Shirak
Toshiyuki and Piero Carninci (RIKEN)
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.B.G. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
DNA Sequencing by: Sequencing Group at the Stanford, CA 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (01-JUN-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg, R.
Direct Submission
                                                                                                                                                                              Web site: http://www-shgc.stanford.edu Contact: (Dickson, Mark) mcd@paxil.stanford.edu Dickson, M., Schmutz, J., Grimwood, J., Rodrique
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BC071567

Homo sapiens SNF-1 related kinase,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IMAGE: 4375623), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAAAGCAAGAGAAAGAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 5140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 5140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA
mRNA
                                                                                                                                                                                 Rodriquez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
(cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1754
                                                                                                                                                                              Α.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRI 25-JUN-2004
MGC:87067
                                                                                                                                                                                    and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                 Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1654
```

```
RESULT 8
AF387809
                                                                                                                                                                              δ
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                          δ
                                                                                                                                              밁
                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 398; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gource
                                                                                                                                                                                                                        1198
                                                                                                                                                                                                                                                                                              1138
                                                                                                                                                                                                                                                                                                                                                                      1078
                                                                                                                                                                                                                                                                                                                                                                                                                                            1018
                                                                                                                                                1258
                                                                                                                                                                                    301
                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              passed
                                                                                                                                                                     AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 360
                                                                                                                                                                                                                                           CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA 1197
                                                                                                                                                                                                                                                                                                                                                                  AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGGAGCACAACAGCAT 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCAAGAGAAGGGGC
                                                                                                                                                                                                                      CATTCAGCGCATGGTGCTTGGGGACATAGCCGGATCGAGACGCCATTGTAGAAGCCCCTGGA 240
                                                                                                                                                                                                                                                                                                                                                                                             AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCCGGAAGAGGAGGAGCACAACAGCAT 180
                                                                                              GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCAG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCTAAAGAGTGTAAAGACCTAATCACACGGATGCTACAGAGAGATCCCAAGAGAAGGGGC
                                                                                                                                                  AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /translation="magfkrgydgkiaglydldktlgrghfavvklarhvftgekvav
kvidktkldylatrighlegevrchklychriu vrlyguiddygkut ylileledggmfd
yimkheeglwedlakkyfaqivhaisychklydkolingigkutierledggmfd
yimkheeglwedlakkyfaqivhaisychklukpenvvfeekoglykltdeg
fsnkropgkklttscgslaysafeilledbydafavdinslgvilemlycgoppoga
ndsetitmindckytwpshvskeckdlitrmlordpkraylebiermynhitatyflae
atkyniplysykulsebehnsiiormykldiadpakatylebietnrynhitatyfllae
rilrekorekeiotrakspsnikaoproksptkidvpolleddlyafplskrukpospa
atkyniplksykulsebehnsiiormpkslitrvpaglleddlyafplskrukpospa
raldsylnohrskglcosakkodlpellagaflstvppaglikptaggrkcifrvebde
edebkkpmslstoyvlrrksyntrksogrgsscssstsdddserrrldkddsfyrhelpek
lsrlknniaspotyhkryhrksogrgsscssstsdddserrrldkddsgtysher
rossbeppssmolasrakelveslklmslclgsolhgstkyiidponglsfssykvoek
stykkoisstonagovakaggivekabschmadtteerirsknikanvlolpelcekti
svniornpkegllcasspascchvi"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="SNRK"
/note="synonyms: FLJ20224, HSNFRK, KIAA0096"
/db_xref="LocusID:54861"
245. .2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product="SNRK protein"
/protein_id="AAH71567.1"
/db_xref="GI:47939484"
/db_xref="LocuBID:54861"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db xref="taxon:9606"
/db xref="taxon:9606"
/clone="MGC:87067 IMAGE:4375623"
/tlssue type="Brain, hippocampus"
/clone_Tib="NIH MGC_95"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             e following selection criteria: matched mRNA gi: 21361642.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Vector: pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .5140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 396.8; DB 9;
Pred. No. 2.4e-107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                        1257
                                                                                                                                                                                                                                                                                                                                                                                                                                          1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ð
                                    밁
                                                                    S
                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                          Best Local
Matches 35
                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
   61
```

```
polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kertesz,N., Samson,J., Debacker,C., Wu,H. and Labastie,M.-C. Cloning and characterization of human and mouse SNRK sucrose non-fermenting protein (SNF-1)-related kinases Gene 294 (1-2), 13-24 (2002)
2 (bases 1 to 4708)
Labastie,M.-C. and Samson,J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (25-OCT-2001) Institut d'Embryologie Cellulaire e Moleculaire, CNRS et College de France, 49 bis, Ave. de la Gabrielle, Nogent Sur Marne 94130, France Sequence update by submitter On Oct 25, 2001 this sequence version replaced gi:15420742.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (01-JUN-2001) Institut d'Embryologie Cellulaire et Moleculaire, CNRS et College de France, 49 bis, Ave. de la Belle Gabrielle, Nogent Sur Marne 94130, France 3 (Dases 1 to 4708) Labastie, M.-C. and Samson, J.

Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AF387809 4708 bp mRNA linear ROD 13-SEP-2002
Mus musculus strain BALB/c SNF-1 related kinase (Snrk) mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AF387809.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complete cds.
AF387809
h 81.0%;
Similarity 88.2%;
52; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 4708)
                                                                                                                                                                 4662. .4667
                                                                                                                                      PASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               149. .2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Mus musculus"
/mol_type="mRNA"
/strain="BALB/c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Metazoa; Chordata;
Eutheria; Rodentia;
                                                                                              /gene="Snrk"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="SNRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dev_stage="12.5 dpc"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="taxon:10090"
tissue_type="yolk sac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:16418486
Score 323.8; DB 10;
Pred. No. 1.6e-85;
0; Mismatches 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cellulaire et
, Ave. de la B
                                          4708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Belle
```

TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC 120 GTCTGCAGGGTGCAGGGACCTGATCACACGAATGCTACAGAGAGATCCCAAAAAGGAGAGC 921 GTCTANAGAGTGTANAGACCTAATTACACGGATGCTACAGAGAGATCCCAAGAGAAGGGC 60

0

Indels

0

Gaps

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNSNF1KIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X89383.1 GI:1213223
SNP1-related kinase; snrk gene.
Rattus norvegicus (Norway rat)
Rattus norvegicus (Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (03-JUL-1995) J. Heukelbach, Institut fuer Pharmakologie und Toxik., der RWTH Aachen, Wendlingweg 2, D-52057 Aachen, FRG Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Becker, W., Heukelbach, J., Kentrup, H. and Joost, H.G. Molecular cloning and characterization of a novel m kinase harboring a homology domain that defines a s serine/threonine kinases serine/threonine kinases [Sur. J. Biochem. 235 (3), 736-743 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R.norvegicus mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8654423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96184553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNSNF1KIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Heukelbach,J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGTATAACATTCCCCTCGTGTCCTACAAGAACCTCTCCGAGGAAGAGCACAACAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCTCTGGAAGAGATTGAAAGCCACCCTTGGCTCCAGGGAGTGGACCCATCACCAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAAAAGCAAGAGAAAGAAATACAGACCAGGTCTGCTAGCCCCAGCAACATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAAAAGCAAGAAAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AACCAACAGGTACAACCACATTACCGCCACTTACTTTTTACTTGCTGAAAGGATCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1
  /gene="sirk"
/gene="sirk"
/codon start=1
/product="SNF1-related kinase"
/product="SNF1-related kinase"
/product="SNF1-related kinase"
/product="SNF1-related kinase"
/protein_id="calated kinase"
/protein_id="calated kinase"
/db_xref="GI:1213224"
/db_xref="GI:1213224"
/db_xref="GI:1213224"
/db_xref="GI:1213224"
/db_xref="GI:1213224"
/db_xref="GI:1213224"
/db_xref="TIXEMBL:063553"
/db_xref="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVX
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVX
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVX
/translation="MAGFKRGYDGKIAGLYDLDKTLGKTGGEX
/translation="M
                                                                                                                                                                                                                                                                             /gene="
FSNKFQPGKKLTTSCGSLAYSAPEILLGDEYDAPAVDIWSLGVILFMLVCGQPPFQEA
                                                                                                                                                                                                                                                                                                                                                       /tissue_type="ependidymal
/clone_lib="clontech RL101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mo1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                       clone="psk100"
cell_type="fat cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         strain="Sprague-Dawley"
|db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . .3004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to 3004)
                                                                                                                                                                                                                                                                                .2390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      type="mRNA"
                                                                                                                                                                                                                                                                                                          gnrk"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNF1-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3004 bp
                                                                                                                                                                                                                                                                                                                                                       RL1011b"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
kinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mammalian
a subfamily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
BC020189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FOCUS
                                                                                                                                                                                                                                                                                                                                                       AUTHORS
```

```
NDSETLTMIMDCKYTVPPRVSAGCRDLITRMLQRDPKRRASLEBIESHPWLQGVDPSP
ATKYNIPLVSYKNLSBEHNSIIQRMVLGDIADRDAIVBALETINRYNHITATYFLLAB
RILREKQEKEIQTRSASPSNIKAQFRQSWPTKIDVPQDLEDDLTATPLSHATVPQSPA
RAGDSYLNGHRSKGLCIDPAKYDELDELAGFPLSTVPPASLKEDASGRCLFRVEBDEE
EDEEDKKPVSLSTQVVLRRKPSVTNRLTSRKSAPVLNQIFBEGESDDEFDMDENLPPK
LSRLKMNIASPGTVHKRYHRRKSQGRGSSCSSETSDDDESRRRLDKDSGLAYSWHR
RDSSEGPGSEGJGGQSKPSGGGGVDKASFGSSCSSETSDDDSESRRRLDKDSGLAYSWHR
RDSSEGPGSEGJGGQSKPSGGGGVDKASFGEQGTGGSGGGGGGGTFSGTAGSSRRC
AGPDSSSCSPASAAPRGAELVGSLKLVSLCIGSQLHGAKYILDFQKALLSSVKVQERS
TWKMCISAPGPGPSADLDPVRTKKLRNNVLQLPLCEKTISVNIQRSRKEGLLCASSPA
SCCHVI"
```

Query Match Best Local S Matches 351 1223 1103 1043 361 241 181 121 863 351; 61 Similarity CAAGTATAACATTCCCCTCGTGTCCTACAAGAACCTCTCGGAAGAGGAGCACAATAGCAT AAAGTATAACATTCCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACGCAT GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCA CATTCAGCGCATGGTGCTTGGGGACATAGCGGATTGGAGACGCCATTGTAGAAGCCCCTGGA CTCTCTGGAAGAGATTGAAAGCCACCCTTGGCTCCAGGGAGTGGACCCCTCACCAGCCAC TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTAC GTCTGCAGGGTGCAGGACCTCATCACACGGATGCTGCAGAGAGACCCCCAAAAGGAGAGC GTTCAGGCAGTCGTGGCCAACTAAAATTGATGTTCCCCA AGAAAAGCAAGAAAAATACAGACCAGGTCTGCAAGCCCCAGCAACATCAAGGCCCA AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGGCCCGAGCAATATCAAGGCCCA AACCAACAGGTACAACCACCATCACCGCCACTTACTTCTTACTTGCTGAAAGGATCCTGCG CATCCAGCGCATGGTGCTTGGGGACATCGCAGATCGAGATGCCATCGTAGAAGCCCTGGA Conservative 80.5%; <u>,</u> Score 322.2; DB 1 Pred. No. 4.8e-85; 0; Mismatches 48 48; 10; . 1261 . 399 Indels Length 0, Gaps 1102 240 1042 360 300 180 982 922 60 120 0

Strauberg, R.D., Feingold, B.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altechul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., BC020189 BC020189.1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus musculus Mus musculus Mus musculus IMAGE:4482701), (bases 1 to 3101) (house mouse) SNF related 1), complete 3101 bp d kinase, e cds. mRNA (cDNA clone linear MGC:28970 Euteleostomi; Murinae; Mus. ROD 29-JUN-2004 Bhat, N.K.,

TITLE

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Genome Sequence Centre,

BC Cancer Agency, Vancouver, BC, Canada

info@bcgsc.bc.ca

Steve Jones, Sarah Barber, Mabel Brown-John, Yaron Butterfield,

Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth

Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao,

Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin,

Teika Olson, Diana Palnquist, Anca Petrescu, Anna Liisa Prahbu,

Parvaneh Saeedi, JR Santos, Angelique Schnerch, Ursula Skalska,

Duane Smailus, Jeff Stott, Miranda Tsai, George Yang, Jacquie

Schein, Asim Siddiqui, Rob Holt, Marco Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 38 Row: b Column: 17
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 19526941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (19-DEC-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Butterfield, Y.S., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 3101)
                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="SNF related kinase"
/protein_id="AAH20189.1"
/db_xref="GI:18043576"
/db_xref="LocusID:20623"
/db_xref="MGI:108104"
/translation="maggregydgkiaglydldkticgrefavvklarhvftgekvav
/translation="maggregydgkiaglydldkticgrefavvklarhvftgekdapd
KVIDKTKLDTLATGHLFQEVRCMKLVQHPNIVRLYEVIDTQTKLYLILELGDGGDMFD
XIMKHEEGLNEDLAKKYEAQIVHAISYCHKLHVHRDLKDENVYFPEKQGLVKLTDFG
FSNKFQPGKKLTTSCGSLAYSAPEIILLGDEYDAPAVDIWSLGVILFMLVCGQPFPQEA
NDSETLTMIMDCKYTVPFRVSAGCRDLITRMLCRDPKRRASLEEIESHEWLCGVDFSP
ATKYNIFDLVSYKNLSEBEHNSIIQRMVLGDIADRDAIVEALETNRYNHITATYFLLAE
ATKYNIFDLVSYKNLSEBEHNSIIGAPRGSWFTKLDVFQDLEDLIATFLSHATVPQSPA
RAGDNVLNGHRASKGLCDPAKKDBLPELAGPALSTVPFASMKFPASGRKCLFRVEEDEE
EDEEDKKPVSLSTQVVLRRKPSVTNRLTSRKSAPVLNQIFEEGESDDEFDMDENLPK
LSRLKMNIASPGTVHKRYHRRKSQGRGSSCSSSETSDDDSESRRRLDKDSGFAYSWHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="MGC:28970 IMAGE:4482701"
/tissue_type="Mammary tumor. Metallothionien-TGF alpha
model. IO month old virgin mouse. Taken by biopsy."
/clone_lib="NCI CGAP Mam1"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="Snrk"
/codon_start=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="MGI:108104"
191: .2437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="Snrk"
/note="synonyms:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      strain="FVB/N"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                te="synonyms: E030034B15, MGC28970, mKIAA0096"
_xref="LocusID:20623"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      _type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nancy Liao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Morin,
```

```
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
AC118087/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
Muzny, D. Marie, Metzker, M. Lee., Abramzon, S., Adams, C., Alder, J., Allen, C., Allen, H., Alsbrooks, S., Amin, A., Anguiano, D., Anyalebechi, V., Aoyagi, A., Ayodeji, M., Baca, E., Baden, H., Bandaranaike, D., Barber, M., Barnstead, M., Benahmed, F., Baldwin, D., Bandaranaike, D., Barber, M., Barnstead, M., Benahmed, F., Blawalo, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., Bryant, N., Buhay, C., Burch, P., Burrell, K., Calderon, E., Cardenas, V., Carter, K., Cavazos, I., Ceasar, H., Center, A., Chen, Y., Chen, Y., Chen, Z., Chu, J., Checko, J., Chavez, D., Chen, G., Chen, R., Chen, Y., Chen, Z., Chu, J., Cleveland, C., Cockrell, R., Cox, C., Coyle, M., Cree, A., D. Souza, L., Davila, G., Davis, C., Davy, Carroll, L., De Anda, C., Dederich, D., Devila, M. L., Davis, C., Davy, Carroll, L., De Anda, C., Dederich, D., Deramo, C., Ding, Y., Dinh, H., Divya, K., Delgado, O., Denson, S., Deramo, C., Ding, Y., Dinh, H., Divya, K., Draper, H., Dugan-Rocha, S., Dunn, A., Durbin, K., Duval, B., Eaves, K., Egan, A., Escotto, M., Eugene, C., Evans, C.A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbee, L., Foster, M., Gebregoergis, S., Geer, K., Gill, R., Garcia, A., Garner, T., Garza, M., Gebregoergis, S., Geer, K., Gill, R., Gardy, M., Guerra, M., Guevara, W., Harlandez, R., Hanes, S., Hladun, S.L., Hodgson, A., Hernandez, J., Harls, S., Hladun, S.L., Hodgson, A., Hernandez, J., Jackson, L., Jacob, L., Jiang, H., Johnson, B., Johnson, R., Jolivet, A., Jackson, L., Jackson, L., Jang, H., Johnson, B., Johnson, R., Jolivet, A., Jackson, L., Jackson, L., Jang, H., Johnson, B., Johnson, R., Jolivet, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HTG; HTGS PHASE1; HTGS DRAFT; HTGS ENRICHED.
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 unordered
AC118087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AC118087.6 GI:25087331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCA 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGTATAACATTCCCCTCGTGTCCTACAAGAACCTCTCCGAGGAAGAGCACAACAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGTATAACATTCCCCTTGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCTCTGGAAGAGATTGAAAGCCACCCTTGGCTCCAGGGAGTGGACCCATCACCAGCCAC 102:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCTTTAGAAGAGATTGAAAATCATCCTTGGCTTCAGGGGAGTGGACCCTTCACCAGCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCTGCAGGGTGCAGGGACCTGATCACACGAATGCTACAGAGAGACCCCAAAAGGAGAGC 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCTAAAGAGTGTAAAGACCTAATTACACGGATGCTACAGAGAGATCCCCAAGAGAAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTAGGCAGTCATGGCCAACCAAAATTGATGTACCCCA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAAAAGCAAGAGAAAATACAGACCAGGTCTGCTAGCCCAGCAACATCAAGGCCCA 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACCAACAGGTACAACCACATTACCGCCACTTACTTTTTACTTGCTGAAAGGATCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 248901)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGPDSSSPSPASASAAPRGAELVOSLKLVSLCLGSQLHGAKYILDPQKALFSSVKVQE
KSTWKMCISAPGPSPSADLDPVRTKKLRNNALQLPLCEKTISVNIQRSRKEGLLCASS
PASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; 
Sutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 322.2; DB 1
Pred. No. 4.8e-85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   248901 bp |
le CH230-38M5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IN PROGRESS ***,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

δ 밁 ঠ 맑 Ś 밁 ঠ 밁 ঠ 밁 S 밁

```
Kowls, C., Kraft, C.L., Lebow, H., Levan, J., Krally, L., Kovals, C., Kraft, C.L., Lebow, H., Levan, J., Lewis, L., Li, Z., Liu, J., Liu, Mahinoud, M., Malloy, K., Mangum, A., Mangum, B., Malloy, K., Mangum, B., McNeill, T.Z., Meenen, E., Malloy, M., Nair, L., Mankervis, C., Neel, D., Newton, N., Nguyen, N., Norris, S., Parks, K., Naokelemeh, O., Okwoonu, G., Olarupunsagoon, A., Pal, S., Parks, K., Naokelemeh, O., Okwoonu, G., Olarupunsagoon, A., Pal, S., Parks, K., Popovic, D., Primus, E., Pu, L.-L., Plopper, P., Poindexter, A., Perez, L., Pfannkoch, C., Plopper, P., Poindexter, A., Popovic, D., Primus, E., Pu, L.-L., Puazo, M., Quiroz, J., Rachlin, E., Reves, K., Rejer, M.A., Reigh, R., Ridly, B., Reilly, M., Ren, Y., Reuter, M., Rose, R., Ruiz, S., J., Sanders, W., Savery, G., Scherer, S., Scott, G., Shateman, S., Shen, H., Shetimle, M., Strong, R., Sutson, I., Sitter, C.D., Smajs, D., Steimle, M., Strong, R., Sutson, J., Sitter, C.D., Smajs, D., Steimle, M., Strong, R., Sutson, J., Satek, A., Trejos, Z., Usmani, K., Valas, R., Weis, R., Walz, S., Walte, R., Wang, J., Wang, O., Wang, S., Warren, J., Warren, J., Walker, B., Wang, J., Warren, J., Warren, R., Weis, X., White, F., Wang, O., Wang, S., Walte, R., Wooden, H., Worley, K., Williams, G., Willson, J., Zhou, J., Zhou, J., Zhou, J., Zhou, J., Zhou, J., Zhou, J., South, D., Smith, H.O., Weiss, R., Smith, D.R., Holt, R.A., Smith, H.O., Weiss, R., Smith, D.R., Holt, R.A., Smith, H.O., Weiss, R., Smith, D.R., Holt, R.A., Smith, H.O., Smith, H.O., Liu, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (19-NOV-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
On Nov 19, 2002 this sequence version replaced gi:23194785.
The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (http://www.hgsc.bcm.tmc.edu/projecte/rat/). Bach contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads.
* NOTE: Estimated insert size may differ from sequence length
* (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (13-APR-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
3. (bases 1 to 248901)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Worley, K.C.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rat Genome Sequencing Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 248901)
                                                                                                                                                                                                                      Center project name: GUPK
Center clone name: CH230-38M5
Center clone name: CH230-38M5
Center clone name: CH230-38M5
Center clone name: CH230-38M5
Center clone name: Phrap; version 0.990329
Centersus quality: 230944 bases at least Q40
Centersus quality: 2309470 bases at least Q30
Centersus quality: 235397 bases at least Q20
Setimated insert size: 239916; sum-of-centige estimation
Estimated insert size: 239916; sum-of-centige estimation
                                                                                                                                                                                   Quality coverage: 5x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site: http://www.hgsc.bcm.tmc.edu/Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center: Baylor Conter code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---- Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kelly,S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           College of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Kelly, S., Khan, Z., King, L., Kovar, C., Lebow, H., Levan, J., Lewis, L., Li, Z., Liu, J.,
                                                                                                                                                                                         estimation
```

REFERENCE AUTHORS

JOURNAL

REFERENCE

JOURNAL

JOURNAL

COMMENT

```
RESULT 12
AC104184
                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                   rocus
                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                             AUTHORS
                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                              60001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60290 GCCACCCTTGGCTCCAGGGAGTGGACCCCTCACCAGCCACAAAGTATAACATTCCCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 TAATTACACGGATGCTACAGAGAGAGATCCCCAAGAGAAGGGGCTTCTTTAGAAGAGAGATTGAAA 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81 ATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCTTG 140
                                                                                                                                                                   143034 bp
Homo sapiens chromosome 3 clone
AC104184 AC027581
AC104184.2 GI:19697457
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleos Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 143034)
Kaul, R. K., Olson, M. V., Zhou, Y., James, R. A., Rouse, G., Wu, Z., Saenphimmachak, C., Phelps, K. A., Raymond, C. and Haugen, E.D.
                                                                                                               Homo sapiens
                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOTE: This is a 'working draft' sequence. It currently consists of 3 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                              CTAAAATTGATGTACCCCA 59983
                                                                                                                                                                                                                                                                                                                                                                                       CCAAAATTGATGTACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAATCACACGGATGCTGCAGAGAGACCCCCAAAAGGAGAGCCTCTCTGTAAGAGATTGAAA 60291
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACAGACCAGGTCTGCGAGCCCCAGCAACATCAAGCCCCAGTTCAGGCAGTCATGGCCAA 60002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCAGTTTAGGCAGTCATGGCCAA 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACCGCCACTTACTTCTTACTTGCTGAAAGGATCCTGCGAGAAAAGCAAGAGAAAA 6006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCTTG 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACAGCCACATACTTCCTGCTGGCTGAAAGGATCCTGAGAGAAAAGCAAAAGCAAAGAAA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGACATCGCAGACCAAGACGACATCATAGAAGCCCCTGGAAACCAACAAGGTACAACCACA 60122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGAAACCAACAGGTATAACCATA 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCCTACAAGAACCTCTCGGAAGAGGAGCACAATAGCATCATCCAGC------T 60182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        be preserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74634
234494
234594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     157891. .158713
/note="clone_boundary
clone_end:T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        end_sequence:BH281110"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="CH230-38M5"
157891. .158713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic DNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . .248901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74533: contig of 74533 bp in length
74633: gap of unknown length
234493: contig of 159860 bp in length
234593: gap of unknown length
248901: contig of 14308 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68.8%;
85.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                         399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 275; DB 2;
Pred. No. 6.9e-71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                          RP11-188P20,
                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 248901;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 11;
                                                                                                                                                                                                                            complete
                                                                                             Euteleostomi;
                                                                                                                                                                                                                                              PRI 23-MAR-2002
                                                                                                                                                                                                                          sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60231
```

SeqDerMap FngrPrnt SeqDerMap FngrPrnt SeqDerMap FngrPrnt	ORI	experimental and predicted values. Unite separated by dashed lines.	in the table. There no significant remaining discrepancies	Small fragments below a variable cutoff (approximately 400-800 bp)  are not resolved in the financial and heart of the control	The electronically-digested sequence consists of both insert and vector in order to accurately represent the entire circular and	fingerprinting. Comparison of the experimentally derived digest fragments with semience-predicted fragments is diven below	Sequence Validation:  This sequence has been validated by Multiple Complete Direct	subclone; and the assembly was confirmed by restriction digest.	problems, such as compressions and repeats, all regions were	alternate chemistry or covered by high quality data (i.e., Phred	This sequence was finished as follows unless otherwise noted:	of this entry's ASN.1 file.	Base-by-base quality values are not generally visible from the	Quality zero.  Quality zero.  1 2000 to 10 200 to 2000 to have less than	estimates computed by the Phrap assembly program:	Sequence Quality Assessment:	3,	Overlapping Sequences:		Consensus quality: 143024 bases at least Q30 Consensus quality: 143034 bases at least Q20 Trace its 113030 for the consensus quality: 143034 bases at least Q20	Assembly program: Phrap; version 0.990319 Consensus quality: 142918 bases at least 040	Chemistry: Dye-terminator ET; 67% of reads Chemistry: Dye-terminator Big Dye; 33% of reads	Seguencing vector: unknown; 58% of reads Seguencing vector: plasmid; L08752; 42% of reads	Center clone name: RP11-188P20 (bc0291)	Project Information Center project name: chr-3	Contact: uwgchtgs@u.washington.edu Drafting Center: BCM	Center Code: UWGC Web site: http://www.genome.washington.edu	Center: University of Washington Genome Center	COMMENT On Mar 23, 2002 this sequence version replaced gi:17386316.	2		REFERENCE 3 (bases 1 to 143034) Altrinops Vail b V Olson M V Thomas B A Domas C The T	TITLE Direct Submission  JOURNAL Submitted (06-DEC-2001) Genome Center, University of Washington, Roy 152145 Seattle Wa 98195 HSA	RS Kaul, R	Direct Subm
1150	4653	9799	3985	7179	10560	5959	1332	3298	172	1312	18870	788	637	1649	1126	1000	1526	2145	2641	1153	120	507	1935	5481	3796	909	2055	865	631	1514	3643	2540	2882	6	8696
1139	4680	9561	4046	7208	10431	5917	1314	3303	<800	1314	19027	<800	<800	1651	1139	997	1486	2184	2663	1139	<800	<800	1951	5462	3781	897	2049	847	<800	1486	3781	2530	2945	<800	8704
2443	5651	488	3551	66	į		: :	- 1	886	1943	4982	- ;	11469	501	8620	10039	14383	2075	2273	4614	5281	825	45	4712	2926	397	1696	1854	7168	3416	2552	449	512	6382	1129
2517	5589	<800	3581	<800	<800	4178	<800	895	895	1889	4848	1889	11355	<800	8673	9940	14415	2065	2249	4619	5260	895	<800	4619	2977	<800	1655	1889	7307	3369	2517	<800	<800	6515	1114
8040	708	3282	2704	150	8806	3177	: :	:	5754	5134	3363	6080	6593	:	1	4209	- !		2817		- 1	659	856	2132	184	2776	4596	782	7579	365	928	3606	5480	2067	10270
8083	<b>&lt;800</b>	3210	2784	<800	9070	3210	4192	4192	5668	5104	3421	6248	6648	2156	<800	4192	<800	6648	2784	1259	1874	<800	867	2156	<b>^</b> 800	2784	4559	<b>~</b> 800	7709	<800	930	3574	5668	2063	10243

RESULT 13 AC138808/c LOCUS AC138808 BEFINITION Homo sapiens chromosome 5 clone RP11-1026L22, WORKING DRAFT SEQUENCE, 5 unordered pieces. AC138808 VERSION AC138808.1 GI:27805220 KEYWORDS KEYWORDS HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_ACTIVEFIN. SOURCE SOURCE Homo sapiens ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	19 CTAATTACACGGATGCTACAAGAGATCCCAAGAGAAGGGCTTCTTTAGAAGAGATTGA 78	129   129   3827   3766   3917   4839   4848   228   4800   1182   1139   1124   1229   662   4800   1184   1139   1185   4800   4221   4192
Qy         79 AAATCATCCTTGGCTTCAGGGA   Db         132416 AAATCATCCTTGGCTTCAGGGA           Qy         139 TGTGTCATACAAAATCTCTCTCG   Db         132356 TGTGTCATACAAAAATCTCTCTCG           Qy         199 TGGGGACATAGCGGATCGAGAC   Db         132296 TGGGGACATAGCGGATCGAGAC	cation/oas . 186485 . 186485 . 186485 . 186485 . 186485 . 19748 . 1974	E 1 (bases 1 S Sequencing of Sequence of Submitted (2 Genome Institute of Sequence o

```
182487 bases at least Q40
183346 bases at least Q30
183366 bases at least Q30
ze: 175000; agarose-fp estimation
ze: 186085; sum-of-contigs estimation
9.4 in Q20 bases; agarose-fp estimation
8.84 in Q20 bases; sum-of-contigs estimation.
working draft' sequence. It currently
tigs. The true order of the pieces
their order in this sequence record is
exween the contigs are represented as
exween the contigs are unknown.
be updated with the finished sequence
available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contig of 1126 bp in length gap of unknown length contig of 1124 bp in length gap of unknown length contig of 1072 bp in length gap of unknown length contig of 7551 bp in length gap of unknown length contig of 175212 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               omo sapiens"
enomic DNA"
con:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gi.doe.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         romosome 5
                       \CGCCATTGTAGAAGCCCTGGAAACCAACAGGTATA 254
                                                                                                                   CGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCT 198
                                                                                                                                                                                                         HAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCT 138
                                                                                                                                                                                                                                                                                                IGAGAGATCCCAAGAGAAGGGCTTCTTTAGAAGAGATTGA 78
                                                                                                                                                                                                                                                                                                                                                                                        3core 212; DB 2; Length 186485;
3red. No. 4.7e-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             026L22"
CI human BAC library 11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              588774
[-11_1026L22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       istitute
                                                                                         GGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCT 132297
                                                                                                                                                                                 AGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCT 132357
                                                                                                                                                                                                                                                                         GAGAGATCCCAAGAGAAGGGCTTCTTTAGAAGAGATTGA 132417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Production Sequencing Facility, DOE Joint Mitchell Drive, Walnut Creek, CA 94598, USA
CGCCATTGTAGAGTACGTCAATGCCCGTCAGTACA 132241
                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                   15;
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                ٥,
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                   0;
```

```
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
AC143769
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                 Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allan, C., Alsbrooks, S.L., Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allan, C., Alsbrooks, S.L., Amazatunge, H.C., Are, J.R., Ayele, M., Banks, T., Barbaria, J., Bennin, D., Bouck, J., Burch, P., Birkett, C., Burcell, K.L., Byrd, N.C., Carrot, T.E., Chiu, D., Chowdhy, I., Chiako, J., Chavc, C., Chen, G., Chen, R., Chen, C., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., David, R., David, C.D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., David, R., David, C.D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., Delgado, O., Day-Carroll, L., Dederich, D.A., Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H., Douthwaite, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Egan, A., Earnhart, C., Edwards, C.C., Elhaj, C., Emerling, S., Becotto, M., Falls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frant, P., Gabidi, A., Gao, J., Garcia, A., Garner, T., Gazza, N., Gill, R., Gorrell, J.H., Guevara, W., Gunaratne, P., Hale, S., Hamilton, K., Han, J., Harris, C., Harris, K., Hart, M., Hoyles, M., Holloway, C., Hollins, B., Hemsl, F., Howard, S., Huber, J., Hulyk, S., Hume, J., Ioshikheg, I., Jackson, L.E., Jacobson, B., Jia, Y., Johnson, R., Johlvet, S., Joudah, S., Kratovic, J., Kureshi, A., Landry, N., Leals, B., Lee, E., Lewis, L.C., Lewis, L., Li, J., Li, X., Johnson, R., Johlvet, S., Joudah, S., Kratovic, J., Kureshi, A., Landry, N., Leals, B., Lee, E., Lewis, L.C., Kratovic, J., Maheshwari, M., Mapua, P., Marondel, I., Martin, R., Martinez, B., Masey, E., Maynin, P., Netzeon, M., Netzeon, J., Nevseon, N., Nguyen, N., Nguyen, N., Nickerson, E., Nevkenkwo, S., Walley, M., Saver, G., Scherer, S., Scott, G., Sher, H., Shim, C., Shooshite, T., Sparks, A., Stanley, H., Stone, H., Sutok, A., Talocr, R., Johns, N., Velson, R., Walle, R., Wall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HTG; HTGS PHASE2; HTGS PGI.
Macaca mulatta (rhesus monkey)
Macaca mulatta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macaca mulatta clone CH:
AC143769
AC143769.1 GI:29649247
Submitted (09-APR-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
                                                                                                                    Worley, K.C.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (in) Guigo,R. and Gusfield,D. (Eds.);
ALGORITHMS IN BIOINFORMATICS, SECOND INTERNATIONAL WORKSHOP, WABI
2002, ROME, ITALY, SEPTEMBER 17-21, 2002, PROCEEDINGS: 10-28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 160170)
Csuros,M. and Milosavljevic,A.
Pooled genomic indexing (PGI): mathematical analysis and experiment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AC143769
                                                                                                                                                                                                  Unpublished
                                                                                                                                                                          (bases 1 to 160170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    opithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160170 bp
mulatta clone CH250-270D6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to 160170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *** SEQUENCING IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HTG 09-APR-2003 PROGRESS ***.
                                                                                                                                                                                                                                                                                      RESULT 15
AC121264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
     REFERENCE
                                                                                                                                                  KEYWORDS
                                                                                                                                                                                VERSION
```

```
LOCUS
DEFINITION
ACCESSION
                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                 113003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  112823 CCTGATCACACGGATGCTACAGAGAGATCCCAAGAGAGGGCTTCTTTAGAAGAGATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   112883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                        Mus musculus (house mouse)
                                                                                                                                                                                              AC121264 194261 bp DNA linear ROD 13-APR-2 Mus musculus chromosome 9, clone RP24-233F22, complete sequence.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 194261)
                                                                                                                                                AC121264.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html)
NOTE: The contigs are based on the application
of the FGI method using the Human genome (NCBI build 31)
as the comparative genome.
                                                                                                                                                                                                                                                                                                                                                                                TGGGGACATAGCGGATCGAGACGCCATTGTAGA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGTCATACAAAAATCTCTCGGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCCACAAAGTATAACATTCCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTAATTACACGGATGCTACAGAGAGATCCCAAGAGAAGGGGCTTCTTTAGAAGAGAGATTGA 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

1 160170: contig of 160170 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOTE: This is a 'working draft' sequence. It currently consists of 1 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces
                                                                                                                                                                                                                                                                                                                                                 TGGGGACATAGCGGATCGAGACGCCATTGTAGA 113035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Consensus quality: 13142 bases at least Q20 Consensus quality: 1132 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Web site: http://www.hgsc.bcm.
Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Center project name: LASO
Center clone name: CH250-270D6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Center: Baylor College of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="assembly_name:CH250-270D6.1B
CONFIDENCE:_0.83"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
/db_xref="taxon:9544"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clone="CH250-270D6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Macaca mulatta"
                                                                                                                                                  GI:46360003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .160170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .160170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52.0%;
98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         //www.hgsc.bcm.tmc.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 208.2; DB 2; Pred. No. 6.5e-51; 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 160170;
                                                                                                                                                                                                                           ROD 13-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     112882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     112942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
L Submitted (11-MAR-2004) Whitehead Institute/MIT Center for Genome L Submitted (11-MAR-2004) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA (bases 1 to 194261)

4 (bases 1 to 194261)

8 Birren, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N., Anderson, M., Anderson, S., Arachchi, H.M., Barna, N., Bastlen, V., Anderson, M., Anderson, S., Arachchi, H.M., Barna, N., Chang, J., Chang, J., Collymore, A., Cook, A., Cooke, P., Corum, B., Chang, J., Chang, J., Chang, J., Cooke, P., Corum, B., DeArellano, K., Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Farzo, S., Ferreira, P., FitzGerald, M., Gage, D., Galagan, J., Gardyna, S., Graham, L., Grand-Pierre, N., Hafez, N., Hafez, N., Hagopian, J., Hagos, B., Hall, J., Horton, L., Hulme, W., Illev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kells, C., Lui, A., Mabbitt, R., MacLean, C., Macdonald, P., Major, J., Manning, J., Mathewy, C., O'Connell, P., O'Neil, J., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Meneus, L., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Rachupka, A., Ramasamy, U., Raymond, C., Phunkhang, P., Pierre, N., Rachupka, A., Ramasamy, U., Raymond, C., Rogov, P., Roman, J., Schauer, S., Schupback, R., Seaman, S., Severy, P., Smith, C., Spenoer, B., Stange-Thomann, N., Stopham, K., Travers, M., Vassillev, H., Venkataraman, V.S., Viel, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferreira, P., FitzGerald, M., Gage, D., Galagan, J., Gardyna, S., Graham, L., Grand-Pierre, N., Hafez, N., Hagopian, D., Hagos, B., Hall, J., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kalls, C., Landers, T., Levine, R., Lindblad-Toh, K., Liu, X., Lui, A., Mabbitt, R., MacLean, C., Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., Macdonald, P., Major, J., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Meneus, L., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Rachupka, A., Ramasamy, U., Raymond, C., Retta, R., Rise, C., Rogov, P., Roman, J., Schauer, S., Schupback, R., Seaman, S., Severy, P., Smith, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Stubbs, M., Talamas, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassiliev, H., Venkataraman, V.S., Viel, R., Vo, A., Wilson, B., Wu, X., Wwman, D., Vonner, G., Zajnoun, T., Zembek, T., Zimmer, a and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kamat, A., Karatas, A., Kells, C., LaRocque, K., Lamazares, R., Landers, T., Lehoczky, J., Levine, R., Lindblad-Toh, K., Liu, G., MacCean, C., Macdonald, P., Major, J., Marquis, N., Matthews, C., McCarthy, M., McEwan, P., McKernan, K., Meldrim, J., Meneus, L., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., Norman, C.H., O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K., Phunkhang, P., Petre, N., Pollara, V., Raymond, C., Retta, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Roman, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schupback, R., Seaman, S., Severy, P., Spencer, B., Stange-Thomann, N., Stojanovic, N., Strauss, N., Subramanian, A., Talamas, J., Testaye, S., Theodore, J., Topham, K., Travers, M., Travis, N., Trigilio, J., Vassiliev, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (16-MAY-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA 1 (bases 1 to 194261)

Birren,B., Nusbaum,C., Lander,E., Abouelleil,A., Allen,N., Anderson,M., Arachchi,H.M., Barna,N., Bastien,V., Bloom,T., Anderson,M., Arachchi,H.M., Barna,N., Camarata,J., Chang,J., Choepel,Y., Boguslavkiy,L., Boukhgalter,B., Camarata,J., Chang,J., Choepel,Y., Collymore,A., Cook,A., Cooke,P., Corum,B., DeArellano,K., Cook,A., Cooke,P., Corum,B., Exickson,J., Faro,S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., Gardyna S., Fetreira, P., Gardyna S., Fetreira, P., FitzGerald,M., Gare, D., Galagan, T., Gardyna S., Fetreira, P., Gard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkty, L., Boukhgalter, B., Brown, A., Camarata, J., Campopiano, A., Chang, J., Chazaro, B., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Perreira, P., Fitzhugh, W., Gage, D., Galagan, J., Gardyna, Ginde, S., Gord, S., Goyette, M., Graham, L., Grand-Plerre, N., Grands, B., Hotton, L., Hulme, W., Ilev, I., Johnson, R., Jones, C., Kamara, A., Kamara, Kamara, K., Jones, C., Kamara, A., Kamara, K., Kamara, A., Kamara, A., Kamara, A., Kamara, K., Kama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wyman, D., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus chromosome 9, clone RP24-233F22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Birren, B., Nusbaum, C. and Lander, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 194261)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stojanovic, N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Choepel, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gardyna, S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                     repeat_region
                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
```

/rpt family="PB1D10"
complement(3571. .360")
/rpt family complement (7859. complement (6076 /rpt\_family="RSINE1" complement(5253. .54 /rpt\_family="B3A complement(3470. /rpt\_family="PB1D10" 2772. .2888 /rpt\_family="PB1D9" clone\_end:SP6" complement(4. .700) complement (5179 \_1dr\_ complement (5025 /clone\_lib="RPCI-24 Male Mouse BAC" 1. .39168 Location/Qualifiers 'rpt\_family="ID3" /note="wgs\_end\_extension clone\_end:SP6" /mol\_type="genomic DNA /db\_xref="taxon:10090" rpt\_family="RMER17B" clone="RP24-233F22" chromosome="9" organism="Mus musculus" \_family="B3" family="B4A" \_family="MIR" \_family="AT\_rich" \_family="MIR" \_family="B2\_Mm2" family="B4A" \_family="(CTGGGG)n" family="B3A"
ement (2,77 family="(TG)n' family="RMBR1B" family="(TATATG)n" family="ID3" .11857 . 6812 .10950 .5245)

```
S
                                                                 밁
                                                                                               ş
                                                                                                                                    밁
                                                                                                                                                              S
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                          묽
                                                                                                                                                                                                                                                                                                        Ś
   밁
                                                                                                                                                                                                                                                                                                                                        Query Match 43.0%; Score 171.8; DB 10; Length 194261; Best Local Similarity 81.0%; Pred. No. 5e-40; Matches 200; Conservative 0; Mismatches 47; Indels 0; G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                    33270 AAGCCACCCTTGGCTCCAGGGAGTGGACCCATCACCAGCCAAGTATAACATTCCCCT 33329
                                                                                                                                                                                                                                                                     33210 CCTGATCACACGAATGCTACAGAGAGACCCCCAAAAGGAGAGCCTCTCTGGAAGAGATTGA 33269
                                                                                                                                  33330 CGTGTCCTACAAGAACCTCTCCGAGGAAGAAGAGCACAACAGCATCATCCAGCGCATGGTGCT 33389
33450 GCTCACA 33456
                                                                   33390 CGGGGACATCGCGGACCGAGACGCCATCGTAGAGTACGTCAGAGCCCTTCAGACACTAACG 33449
                                                                                                                                                                      139
                               259 TAŢÇĄÇĄ 265
                                                                                                                                                                                                                       79 AAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCT 138
                                                                                                                                                                                                                                                                                          TGGGGACATAGCGGATCGAGACGCCATTGTAGAAGCCCTGGAAACCAACAGGTATAACCA 258
                                                                                                                                                         TGTGTCATACAAAAATCTCTCGGAAGAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="(TTTG)n"
complement(17171. 17237)
/rpt_family="B1F"
complement(17173. .17242)
/rpt_family="ID_B1"
complement(17814. .17997)
/rpt_family="B3"
complement(19134. .19217)
/rpt_family="B91D10"
complement(19134. .19217)
/rpt_family="PB1D10"
20126. .2029
/rpt_family="(CATA)n"
21186. .21260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt_family="ID B1"
complement(16919. 17010)
/rpt_family="PB1D10"
complement(16942. 17023)
/rpt_family="B4A"
complement(17138. 17148)
/rpt_family="B1F"
17149. 17170
                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="(TTTG)n"
complement(23196. .23272)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="B1_MM"
21729. .21779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /rpt_family="(CA)n"
21394. .21539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt_family="AT_rich"
14588. .14795
                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="(TG)n"
22476. .22510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /rpt_family="(TCC)n"
13024. .13044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /rpt_family="15771. .15840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="(CA)n"
22229. .22268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rpt_family="L1MC/D"
|5100. .15171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             family="L1MC/D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="(GAAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="GA-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .ly="PB1D9"
                                                                                                                                                                                                                                                                                                                                          0; Gaps
```

Search completed: January 31, 2005, 16:38:33 Job time : 2231.25 secs

This page Blank Juspio)

1%

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum |
Maximum |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing:
  O
                                                                          000
                                                                                                                 α
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
  149.6
132.2
132.2
132.2
132.2
132.2
131.8
120.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length:
100.0 143334
100.0 186485
92580
82.0 396
82.0 396
40.9 252055
36.1 162162
36.1 194261
36.1 206641
36.0 329
28.0 233777
                                                                                                                                                                                                             Query
Match
                                                                                                                                      100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    January 31, 2005, 09:45:33 ; Search time 2037.02 Seconds (without alignments) 8496.727 Million cell updates
                                                                                                                                                                    100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-996-630A-11_COPY_3800_4165
366
                                                                                                                                                                                         100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4526729 segs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenEmbl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cccttaacctgtcttcaaaa.....acatattggtgttcagcaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copyright
                                                                                                                                                                                                                                                                                                     gb_pr:*
gb_sts:*
gb_sts:*
                                                                                            143034
14885
143034
143034
186485
186485
                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000000000
                                                                                                                                                                                                                                                                                                                                                                                           pat:*
                                                                                                                                                                                                                                                                                                                                                                                                       0V:
                                                                                                                                                                                                                                                                                                                                                                                                                 om:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapext 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             parsu
                                                                                                                                                                                                              BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chosen
                                AX409056
AC106612
AF387809
AL672224
AC121264
AC120394
                                                                                                                           AK026013
AK025449
AX329586
HUMKIAAQ
BC071567
AF226044
AC104184
                                                                                            G07259
AX337742
                                                                                                                 AC138808
                      AX186951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sw model
                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9053458
                            AC104184 Homo sapi
AC138808 Homo sapi
G07259 human STS W
AX337742 Sequence
AX409056 Sequence
AC106612 Rattus no
AF387809 Mus muscu
AL672224 Mouse DNA
AC121264 Mus muscu
AC121264 Mus muscu
                                                                                                                                   AK026013 Homo sapi
AK025449 Homo sapi
AX329586 Sequence
D43636 Human mRNA
BC071567 Homo sapi
AF226044 Homo sapi
                                                                                                                                                                                                             Description
             AX186951 Sequence
AX185525 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell updates/sec
  Mus muscu
                                                                                                                                                                                                                                          TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
AK026013
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                   FEATURES
                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.0
                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                          source
```

ALIGNMENTS

1641 Homo sapiens cDNA: FLJ22360 t AKO26013 NEDO human cDNA sequencing project supported by Ministry of International Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing: Departent of Virology and Human Genome Center, Institute of Medical Science, University of Tokyo (partly supported by Science and Technology Submitted (29-AUG-2000) Sumio Sugano, Institute of Medical Science, University of Tokyo, Laboratory of Genome Structure Analysis, Human Genome Center; Shirokane-dai, 4-6-1, Minato-ku, Tokyo 108-8639, Japan (E-mail:flcdha@ims.u-tokyo.ac.jp, Tel:81-3-5449-5286, Fax.81-3-5449-5416) AK026013.1 GI:10438715 oligo capping; fis (full Homo sapiens (human) Homo sapiens 2 (bases 1 to 1641)
Sugano,S., Suzuki,Y., Ota,T., Obayashi,M., Nishi,T., Isogai,T.,
Shibahara,T., Tanaka,T. and Nakamura,Y.
Direct Submission Kawabata,A., Hikiji,T., Kobatake,N., Inagaki,H., Ikema,Y., Okamoto,S., Okitani,R., Ota,T., Suzuki,Y., Obayashi,M., Nishi,T., Shibahara,T., Tanaka,T., Nakamura,Y., Isogai,T. and Sugano,S. Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Agency). Unpublished NEDO human cDNA sequencing project /organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606" /clone="HRC06511" Location/Qualifiers /cell\_type="primary human renal epithelial cells" /clone\_lib="HRC" /clone\_lib="HRC"
/note="cloning vector pME18SFL3" insert sequence) fis, mRNA clone l A linear HRC06511. PRI 13-SEP-2003

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
AK025449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                          FEATURES
                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                    NEDO human cDNA sequencing project supported by Ministry of International Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing: Departent of Virology and Human Genome Center, Institute of Medical Science, University of Tokyo (partly supported by Science and Technology
                                                                                                                                                                                                               Submitted (29-AUG-2000) Sumio Sugano, Institute of Medical Science, University of Tokyo, Laboratory of Genome Structure Analysis, Human Genome Center; Shirokane-dai, 4-6-1, Minato-ku, Tokyo 108-8639, Japan (E-mail:flcdha@ims.u-tokyo.ac.jp, Tel:81-3-5449-5286, Fax:81-3-5449-5216)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AK025449.1 GI:10437966
oligo capping; fis (full insert sequence)
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens cDNA: FLJ21796 fis, AK025449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                    2 (bases 1 to 3361)
Sugano,S., Suzuki,Y., Ota,T., Obayashi,M., Nishi,T., Isogai,T., Shibahara,T., Tanaka,T. and Nakamura,Y.
                                                                                                                                                                                                                                                                                                                                                                                            Kawabata,A., Hikiji,T., Kobatake,N., Inagaki,H., Ikema,Y., Okamoto,S., Okitani,R., Ota,T., Suzuki,Y., Obayashi,M., Nishi,T., Shibahara,T., Tanaka,T., Nakamura,Y., Isogai,T. and Sugano,S. NEDO human cDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                            Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                 Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATTCTATCTGTATTTAAAGATGTGACAATCTTGACAATTTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 366
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 366; DB 9; 100.0%; Pred. No. 1.7e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA linear clone HEP00537.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRI 13-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
AX329586
                          Ś
문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                             госиз
                                                      Query Match
Best Local S
Matches 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Sim
Matches 366;
                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                     AUTHORS
                                                                   Local Similarity
3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                      366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                               AX329586
Sequence
AX329586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAAATATTGTG
                                                                                                                                                                                                                                      Young, P.E., Augustus, M., Carter, K.C., Ebne
Horrigan, S., Soppet, D.R. and Weaver, Z.
Cancer gene determination and therapeutic
                                                                                                                                                                                                                         gene sets
                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                    AX329586.1
                                                                                                                                                                                               Avalon Pharmaceuticals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAAT 3336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACAGGTATGTGACAAATGGGAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACAGGTATGTGACAAATGGGAAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                   WO 0194629-A 95 13-DEC-2001;
Pharmaceuticals (US)
Location/Qualifiers
1. 4165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="HEP00537"
/cell line="HepG2"
/cell type="hepatoma"
/clone_lib="HEP"
/note="cloning vector p
                                                                                                                                                                                                                                                                                                                                                                                              95 from
                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                    organism="Homo sapiens"
                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                               Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . . .
                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                    Score 366; DB 6;
Pred. No. 1.4e-64;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 366; DB 9;
Pred. No. 1.5e-64;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                               WO0194629
                                                                                                                                                                                                                                                                                                                                                                                                           đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pME18SFL3
                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                   Ebner, R., Endress, G.,
                                                                              Length 4165;
                                                                                                                                                                                                                                        screening using signature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 3361;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                             PAT 09-JAN-2002
                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,,</u>
                                                    Gaps
3859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

1,

```
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
HUMKIAAO
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                           CDS
                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                           2 (bases 1 to 4882)
Chara, O., Magase, T., Kikuno, R. and Nomura, N.
Direct Submission
Submitted (24 NOV-1994) Osamu Ohara, Kazusa DNA Research Institute;
1532-3, Yana, Kisarazu, Chiba 292-0812, Japan
(B-mail:cdnainfo@kazusa.or.jp, Tel:+81-438-52-3913)
On May 9, 2002 this sequence version replaced gi:598957.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human mRNA for KIAA0096 gene,
D43636
D43636.2 GI:20521877
KIAA0096.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nagase, T., Miyajima, N., Tanaka, A., Sazuka, T., Seki, N., Sato, S., Tabata, S., Ishikawa, K.-i., Kawarabayasi, Y., Kotani, H. and Nomura, N. Prediction of the coding sequences of unidentified human genes. III. The coding sequences of 40 new genes (KIAA0081-KIAA0120) deduced by analysis of cDNA clones from human cell line KG-1 DNA Res. 2 (1) 37-43 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HUMKIAAQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCCAATTTTAAGAATAGCTGTGAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT 4099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTTAAGAGGGTACAGAAT 4039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTCTATCTGTATTTÄÄÄGATGTGÄCÄÄTCTTGÄCÄCCÄÄTTTTÄÄGGÄTÄGCTGTGÄG 3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAAT 4165
/gene="KIAA0096"
/note="KIAA0096 gene product is
kinase."
                                                         /gene="KIAA0096"
<1. .2302
                                                                                                           Cell_type="myeloblast"
/tissue type="brain"
/clone Ibpe="brain"
/clone The "pBluescriptII SK plus"
/note="This sequence was obtained by subcloning of the DNA
/note="This sequence was obtained by subcloning of the DNA
/ragments derived from two cDNA clones (1 - 1013 was
derived from a RT-PCR product (Lung) and 1014 - 4882 was
derived from ha01240)."
                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
/clone="ha0124081"
                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                 1. .4882
                                                                                                                                                                                                                                                line="KG-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4882 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 partial cds.
                 related to
                 a protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRI 10-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4159
```

```
ORIGIN
                                                                                                                                                                   y Match
4517
                                                                                                                                                                       Similarity
                                       CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG 60
CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                   ANDSETLIMINDCKYTVPSHYSKEÜLITRILQRIDERRASLEEIENHPILGGUDER PATKYNI PLVSYKNLSEEEHNS I I QRMVLGUI PARASLEEI ENHPILGGUDER PATKYNI PLVSYKNLSEEEHNS I I QRMVLGUI ADDDA I VEALETNRYNH I TATYFLLA ER I LERKQEKEI QTRSAS PSNI KAQFRQSWPTKI DVPQDLEDDLTATFLISHATVPQSP ARAADSVLNGHRSKGLOSAKKDDL PELAGPALSTVPPASLKVTLASTRKLLERVESDE EEDEBDKERNSKGLOSAKKDDL PELAGPALSTVPPASLKVETASGRKCLLERVEEDDE EEDEBDKKPMSLSTQVVLRKRSVTMRLTSRKSA PVLNQ I FEBGESDDEFDMOENL PPKLSRLKMNI AS PGTVHKRYHRRKSQGRGSSCSSETSDDDSESRRRLDKDSGFTYSWHRDSSEGFPGSEGDGGQSKESNASGGVDKASPSENNAGGGSPSGSGSGNFTWTSGTTRACAGPSNSMQLASRAGELVESLKLMSLCLGSQLHGSTKY I I DPQNGLSFSSVKVQEKSTWKNCI SSTGNAGGVPAVGGI KFFSDHMADTTTELER I KSKNLKNNVLQLPLCEKT I SVNI QRNPKEGLLCASSPASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=2
/proteIn_id="BAA07744.2"
/proteIn_id="BAA07744.2"
/db_xref="GI:20521878"
/translation="SMAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVA
/translation="SMAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVA
VKVIDKTKLDTLAKTGHLFQEVRGLVKLTGHDIYDLYEVIDTUYLTLLELGDGGDMF
DYIMKHEEGLHAEDLAKKYFAQIVHALSYCHKLHVVHRDLKFBNVVFFBKGGLVKLTGF
GFSNKFQPGKKLTTSCGSLAYSAPEILLGDEYDAPAVDIWSLGVILFMLVCGQPPFQE
                                                                                                                                                                100.0%;
                                                                                                                                   0,
                                                                                                                            Score 366; DB y; ... Pred. No. 1.4e-64;
                                                                                                                                                                                                       Length
                                                                                                                                       Indels
                                                                                                                                   0;
                                                                                                                                   Gaps
                                                                                                                                       0
```

```
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                 RESULT 5
BC071567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Best L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 366;
                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                        4877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4577
                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausmer, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusins, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
                                                                                                                                                                                                                                                                           5140 bp
Homo sapiens SNF-1 related kinase,
IMAGE:4375623), complete cds
BC071567
                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                         BC071567
                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                        BC071567.1 GI:47939483
                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAAT 4882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGGTACAGAAT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                             (bases 1 to 5140)
                                                                                                                                                                                                                      sapiens (human)
                                                                                                                                                                                                                                                                                                             mRNA
mRNA
                                                                                                                                                                                                                                                                                                             linear
(cDNA clone
                                                                                                                                                                                                                                                                                                             PRI 25-JUN-2004
MGC:87067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4636
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Abramson, R.D., Mullahy, S.J., Bosak, S.A., McBwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LIMI at: http://image.llnl.gov Series: IRAK Plate: 167 Row: b Column: 13
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21361642.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: Cgapbs remail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
CDNA Library Preparation: Michael J. Brownstein (NHGRI) &
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human of Center, Stanford University School of Medicine, Stanford, Center, Stanford University School of Medicine, Stanford, Web site:

Web site:
Web site:
Web site:
Meb si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (01-JUN-2004) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Proc. Natl. Acad. Sci. 12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 5140)
                                  /product="SNRK protein"
/protein id="SNRK protein"
/protein id="ANAT1567.1"
/db_xref="G1:47939484"
/db_xref="G1:47939484"
/db_xref="G1:47939484"
/db_xref="G1:47939484"
/db_xref="LocusID:54861"
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
KVIDKTKLDTLATGHLFQEVRCMKLVQHPNIVELGVLTFGTKLYLILFMLVGQDPFQBA
KVIDKTKLTSCGSLAYSAPEILLGDEYDAPAVDIMSLGVLFMLVGQDPFQBA
RNASFTLTMMNDCKYTVPSHVSKECKDLITRMLQRDFKRAYLBEIENHPMLQGVDPSP
ATKYNIPLVSYKNLSEEEHNSIIQRMVLGDIADRATVEALETMRYNHITATYFLLAE
RILREKQEKEIQTRSAPSNIKAQFRQSWPTKIDVPQDLEDDLTATPLGHATVPQSPA
RAADSVLNGHRSKGLCDSAKKDDLPELAGPALSTVPPASLKPTASGRKCLFRVEEDEE
EDEBDKKPMSLSTQVVLRRKKPSVTNRLTSRKSAPVVNQIFEEGESDDEEDMERLPFK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="texon:9606"
/clone="MGC:87067 IMAGE:4375623"
/tissue type="Brain, hippocampus"
/clone lib="NIH MGC 95"
LSRLKMNIASPGTVHKRYHRRKSQGRGSSCSSSETSDDDSESRRRLDKDSGFTYSWHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="synonyms: FLJ20224, HSNFRK, KIAA0096"
/db_xref="LocusID:54861"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="SNRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="SNRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .5140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CA 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94305
```

FEATURES

CDS

COMMENT

REMARK

TITLE

```
JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
AF226044
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 366;
                                                                                                                                      gene
                                                                                                          SdC
                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5119 AGCAAT 5124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4999 TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTTCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 5519)
Li,Y., Wu,T., Xu,S., Ren,S., Chen,Z. and A novel gene expressed in human adrenal Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                2 (bases 1 to 5519)
Li,Y., Wu,T., Xu,S.,
Direct Submission
                                                                                                                                                                                                                                                  Submitted (19-JAN-2000) Chinese National Human Genome Center at Shanghai, 351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudon Shanghai 201203, P. R. China
                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens HSNFRK (HSNFRK)
AF226044
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF226044.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AF226044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACAGGTATGTGACAAATGGGAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACAGGTATGTGACAAATGGGAAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTTAAGAGGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
/Codon_start=1
/product="NSNFXK"
/protein_id="AAP86944.1"
/db_xref="GI:9295327"
/translation="MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAV
                                                                                                          642. .2939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STWKMCISSTGNAGQVPAVGGIKFFSDHMADTTTELERIRSKNLKNNVLQLPLCEKTI
SVNIQRNPKEGLLCASSPASCCHVI"
                                                                                                                       /gene="HSNFRK"
                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                      gene="HSNFRK"
                                                                                                                                                                                    organism="Homo sapiens"
|mol_type="mRNA"
                                                                                                                                       'tissue_type="adrenal gland"
.. .5519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:9295326
                                                                                                                                                                                                                       .5519
                                                                                                                                                                         xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                               Xu,S., Ren,S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 366; DB 9; 100.0%; Pred. No. 1.4e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                 Chen, Z.
                                                                                                                                                                                                                                                                    Zhangjiang Hi-Tech Park, Pudong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           complete cds.
                                                                                                                                                                                                                                                                                                                  and Han, Z.
                                                                                                                                                                                                                                                                                                                                                                                and Han, Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 5140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRI 20-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

YIMKHEEGLNEDLPKKYFAQIVHAISYCHKLHVVHRDLKPENVVFFEKOGLVKLTDFG
FSNKFOPGKKLTTSCGSLAYSAPEILLGDEYDAPAVDIWSLGVILFMLVCGQPPFQEA
NDSETIJMINDCKYTVPSHVSKECKDLITRMLQRDPKRASLEEIENHPHLQGVDPSF
ATKYNIFLVSYKKUSEBEHNSIIQRMVLGDIRADRAIVEALETMRYNHITATYFLLAE
RILREKQEKEIQTRSASPSNIKAQFRQSWFTKIDVPQDLEDDLTATFLHAFTVPQSPA
RAADSVLNGHRSKGLCDSAKKDDLPELAGPALSTVPPASLKPTASGRKCLFRVEEDEE
EDEEDKKEMSLSTQVVLLRKPSVTMRLTSRKSAFVLNQIFEEGSSDDEFDMDENLPK
LSRLKMNIASPCTVHKRYHRKQGRGSSCSSETSDDDSESSMSCDSFTMTSTGTTK
RAGSPSNSMQLASRSAGELVESLKMSLCLGSQLHGSTKYIDPQNGLSFSSVTVQSTK
RCAGFSNSMQLASRSAGELVESLKMSLCLGSQLHGSTKYIDPQNGLSFSSSVTVQEK
STWKMCISSTGNAGQUPAVGGIKFFSDHMADTTTELERIKSKNLKNNVLQLPLCEKTI SVNIQRNPKEGLLCASSPASCCHVI" KVIDKTKLDTLATGHLFQEVRCMKLVQHPNIVRLYEVIDTQTKLYLILELGDEGDMFD

REFERENCE AUTHORS REFERENCE AUTHORS SOURCE ORGANISM DEFINITION ACCESSION VERSION KEYWORDS AC104184 LOCUS á 밁 S á S RESULT 7 문 ₽ 밁 밁 ঠ 밁 Ś 밁 ORIGIN REFERENCE TITLE Matches Query Match Best Local Similarity JOURNAL JOURNAL 5454 5514 5394 5334 5274 5154 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG 241 181 121 361 301 366; 61 щ Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 143034)

Kaul,R.K., Olson,M.V., Zhou,Y., James,R.A., Rouse,G., Wu,Z., Saenphimmachak,C., Phelps,K.A., Raymond,C. and Haugen,E.D.

Direct Submission 2 (bases 1 to 143034)
Kaull.R.K., Olson,M.V., Raymond,C. and Haugen,E.D.
Direct Submission
Submitted (06-DEC-2001) Genome Center, University of Washington,
Box 352145, Seattle, WA 98195, USA
3 (bases 1 to 143034) Homo варіелв chromosome AC104184 AC027581 AC104184.2 GI:19697457 Unpublished Homo AC104184 AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTTAAGAGGGTACAGAAT 240 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG AGCAAT 5519 AGCAAT 366 TGACAGGTATGTGACAAATGGGAAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC 360 TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT 300 ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG nilarity 100.0%; • Conservative ( sapiens 0; 143034 bp DNA linear PRI 23-MAR-ne 3 clone RP11-188P20, complete sequence. Score 366; DB 9; Pred. No. 1.3e-64; ); Mismatches 0; Length Indels PRI 23-MAR-2002 0; Gaps 5513 5453 5393 5333 180 5273 120 5213 60

TITLE Kaul, R.K., Olson, M.V., Zhou, Y., James, R.A., Saenphimmachak, C., Phelps, K.A., Raymond, C. and Haugen, E.D.

> COMMENT JOURNAL Submitted (23-MAR-2002) Genome Center, University of Washington, Box 352145, Seattle, WA 98195, USA
> On Mar 23, 2002 this sequence version replaced gi:17386316. Chemistry: Dye-terminator ET; 67% of reads Chemistry: Dye-terminator Big Dye; 33% of reads Assembly program: Phrap; version 0.990319 Consensus quality: 142918 bases at least Q40 Consensus quality: 143028 bases at least Q30 Consensus quality: 143028 bases at least Q30 Consensus quality: 14304 bases at least Q30 Insert size: 142838; sum-of-contigs Quality coverage: 8.0x in Q20 bases; sum-of-contigs Sequencing vector: unknown; 58% of reads Sequencing vector: plasmid; L08752; 42% Center project name: chr-3
> Center clone name: RP11-188P20 (bc0291)
> ------ Summary Statistics Drafting Center: BCM Web site: http://www.genome.washington.edu Center: University of Washington Genome Center Code: UMGC Contact: uwgchtgs@u.washington.edu Project Information 42% of reads Center

Overlapping Sequences:

5': Mapping in progress
3': RP11-258N2 (UWGC:bc0637) AC024378

Sequence Quality Assessment:

This entry has been annotated with sequence quality estimates computed by the Phrap assembly program.

All manually edited bases have been reduced to quality Quality levels above 40 are expected to have less than 1 error in 10,000 bp. GenBank of this Base-by-base quality values are not generally visible GenBank flat file format but are available as part entry's ASN.1 file. from zero.

This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., Phre quality = 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. Phred

Sequence Validation:
This sequence has been validated by Multiple Complete Digest fingerprinting. Comparison of the experimentally derived digest fragments with sequence-predicted fragments is given below. The electronically-digested sequence consists of both insert and vector, in order to accurately represent the entire circular BAC. Small fragments below a variable cutoff (approximately 400-800 bp are not resolved in the fingerprint and hence do not appear in the table. There are no significant remaining discrepancies between the experimental and predicted values. Uniquely ordered fragments are separated by dashed lines.

			1 1 1 1 1 1 1		
930	928	2517	2552	3781	3643
	111111		1 1 1 1 1 1		
3574	3606	<800	449	2530	2540
	1 1 1 1 1 1				
5668	5480	<b>~800</b>	512	2945	2882
2063	2067	6515	6382	<800	6
10243	10270	1114	1129	8704	8696
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1			1
<b>FngrPrnt</b>	SeqDerMap FngrPrnt	<b>FngrPrnt</b>	SeqDerMap FngrPrnt	FngrPrnt	SeqDerMap FngrPrnt
H	BglII	III	BCORI HindIII	RI	ECORI
		(((			

7764 7701 1249 1229 3827 3766 5866 5917 4839 4848 228 <800 1182 1139 1244 1229 662 <800 1154 1139 185 <800 4221 4192 973 997 1386 1353 9761 9678 2345 2368 2602 2517 1167 1161	909 997 397 600 2776 2784 3796 3781 2926 2977 184 6800 5481 5462 4712 4619 2132 2156 597 4800 825 895 659 4800 120 4800 5281 5260 1899 1874 1153 1139 4614 4619 1261 1259 2641 2663 2273 2249 2817 2784 2145 2184 2075 2065 6712 6648 1526 1486 14383 14415 128 6800 11000 997 10039 9940 4209 4192 1126 1139 8620 8673 466 6800 118870 19027 4982 4884 3363 3421 1312 1314 1943 1889 5134 5104 1332 1314 1943 1889 5754 5668 3298 3303 881 895 4281 4192 1356 10431 593 4800 9988 9070 7179 7208 66 4800 150 6800 1150 1130 2448 6800 3282 3210 1150 1130 2448 5589 708 6800	1486 3416 3369 365 <a href="#"><a href="#">4800</a> 7168 7307 7579 847 1854 1889 782 2049 1696 1655 4596</a>
RESULT 8 AC138808/c AC138808/c AC138808 DEFINITION Homo sapiens chromosome 5 clone RP11-1026L22, WORKING DRAFT SEQUENCE, 5 unordered pieces. ACCESSION AC1388008 VERSION KEYWORDS KEYWORDS SOURCE ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		225 <800

```
JOURNAL
REFERENCE
AUTHORS
                                                                                                         ঠ
                                                                                                                                                                             S
                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
     밁
                                 Ş
                                                                         밁
                                                                                                                                              밁
                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 366; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                      121990
     121810
                                                                                                                                                121930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Consensus quality: 182487 bases at least Q40
Consensus quality: 183346 bases at least Q30
Consensus quality: 183866 bases at least Q20
Consensus quality: 183866 bases at least Q20
Estimated insert size: 175000; agarose-fp estimation
Estimated insert size: 196085; sum-of-contigs estimation
Quality coverage: 9.4 in Q20 bases; agarose-fp estimation.
* NOTE: This is a 'working draft' sequence. It currently
* consists of 5 contigs. The true order of the pieces
* is not known and their order in this sequence record is
* arbitrary. Gaps between the contigs are represented as
* runs of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence.
                                       181
                                                                                                              121
                                                                                                                                                                                    61
                                                                                                                                                                                                                                                        μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Project Information
Center Project Name: 1688774
Center clone name: RPCI-11_1026L22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (21-JAN-2003) Production Sequencing Facility, DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA
-----Genome Center
Center: Joint Genome Institute
Center Code: JGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 186485)
DOE Joint Genome Institute.
Sequencing of Human Chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Summary Statistics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 (bases 1 to 186485)
DOE Joint Genome Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                   AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCCAATTTTAAGAATAGCTGTGAG 180
                                                                                                                                                                                                                      CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG 121931
                                                                                                                                                                                                                                         CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             as soon as it is available and the accession number will be preserved.
                        ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT 121751
                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1127
1227
2351
2451
3523
                                                                                                                                                                                                                                                                                                                                                                                /clone="RP11-1026L22"
/clone_lib="RPCI human BAC library 11"
                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                http://www.jgi.doe.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . .186485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1126: contig of 1126 bp in length
1236: gap of unknown length
2350: contig of 1124 bp in length
2450: gap of unknown length
3522: contig of 1072 bp in length
3622: gap of unknown length
1173: contig of 7551 bp in length
11273: gap of unknown length
11273: gap of unknown length
118485: contig of 175212 bp in length.
186485: contig of 175212 bp in length.
                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                        Score 366; DB 2;
Pred. No. 6.7e-65;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               in length
                                                                                                                                                                                                                                                                                                                            Length 186485;
                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                          <u>,</u>
                                                                                                                                                                                                                                                                                        Gaps
                                                                         121811
                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 9
G07259
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
primer_bind
primer_bind
                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human 8
G07259
                                                                                                                                                                                                                                                                                          Buffer:
                                                                                                                                                                                                                                                                                                                                                                                                                        Protocol:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hudson, T
   complement (1971.
```

```
121750 TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT 121691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Whitehead Institute/MIT Center for Genome Research Whitehead Institute for Biomedical Research 9 Cambridge Center, Cambridge MA 02142 USA Tel: 617 252 1900
Fax: 617 252 1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G07259.1 GI:860504
STS; STS sequence;
                                                                                                                                      Prepared with primer pairs derived Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer A: GTGATTATGTATAGCCTTGGAATGG
Primer B: AATGGTCAACACTGCTGATCC
STS size: 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR Profile:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: thudson@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mapped ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Whitehead Institute/MIT Center for Genome Research; Physically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC 121631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACAGGTATGTGACAAATGGGAAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCAAT 121625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 2580)
                                                                                                                                                                                                                   MgCl2: 1.5 mM
KCl: 50 mM
Tris-HCL: 10 mM
                                                                                                                                                                                                                                                                                                                                                                                                   Template: 10 ng
                                                                                                                                                                                                      рн: 9.3
                                                                                                                                                                                                                                                                                                                                                     Primer: each 5 pM
dNTPs: each 4 nM
Tag Polymerase: 0.025 units/ul
                                                                                                                                                                                                                                                                                                                                        Total Vol: 20 ul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Annealing: 56 de Polymerization: PCR Cycles: 35 Thermal Cycler:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2580 bp DNA
STS WI-9364, sequence tagged site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                resoak:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Thomas Hudson
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="texon.9606"
/map="764_B 9; 792_D 7; 817_D_5; 882_B_5; 897_F_7;
946_B 4; 959_E 2; 738_F_11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:860504
                                                                                                                      . 2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer; sequence tagged site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       degrees
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                             from
                                                                                                                                                               D43636 --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                               Unigene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STS 19-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
```

.1991)

126

240 185

7 360 67 300

```
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                            밁
                                                   5
                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
 S
                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
AX337742/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Spoor
                                                                                                                                        Query Match
Best Local S
Matches 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 358; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2215
                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                   363
  121
                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                             gene set
Patent:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                  Young, P.E., Augustus, M., Carter, K.C., Ebne Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                AX337742
Sequence 8251 from Pate
AX337742
AX337742.1 GI:18128461
                                                                                                                                                                                                                                                                              Patent: WO 0194629-A 8251 13-DEC-2001; Avalon Pharmaceuticals (US)
                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                  G-GAAACAGTCTTGTAKTTTCTGTATGTGGSVBAGABATATATAAWTATGTACYTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
 AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                CCCTTAACCTGTCTTCAAAAGGKGCATATAGTTACAGTAGTGTATAAATTTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAAT 2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGACAGGTATGTGACAAATGGGNNNNNNNTCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                           sets
                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8251 from Patent
                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNJ
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                     82.0%;
91.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.8%;
97.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>,</u>
                                                                                                                                       Score 300; DB 6; I
pred. No. 5.3e-51;
7; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 358; DB 11;
Pred. No. 6.5e-63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           396 bp [
WO0194629]
                                                                                                                                                                                                                         DNA"
                                                                                                                                                                 DB 6; Length 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                               Ebner, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 2580;
                                                                                                                                                                                                                                                                                                                    screening using signature
                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                 Endress, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 09-JAN-2002
                                                                                                                                       ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2274
                                                     120
                                                                                304
                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
AX409056/c
                                              S
                                                                                                                                                            Ś
                                                                                                                                                                                           밁
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                        밁
                                                                                밁
                                                                                                      ঠ
                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                       멹
                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                   301
                                                                                                                                       184
                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                        363
361
                                                                                  125
                                                                                                            241
                                                                                                                                                                                              244
                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                 303 G-GAAACAGTCTTGTAKTTTCTGTATGTGGSVBAGABATATATAAWTATGTACYTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244
                         99
                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                             333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66
                                                                                                                                                                                                                                                                                                                            1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATTATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX409056
Sequence 1703 from Patent
AX409056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alvares, C., Horne, D., Peres-da-Silva, S. and Gene expression profiles in liver cancer Patent: WO 0229103-A 1703 11-APR-2002; GENE LOGIC INC (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX409056.1
                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                    ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                             CCCTTAACCTGTCTTCAAAAGGKGCATATAGTTACAGTAGTGTATAAATTTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCGRATT-AAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAAT 366
                                         TGACAGGTATGTGACAAATGGGAAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                       ACCGRATT - AAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                           AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGGTACAGAAT
                                                                                  TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCYCATTGTGT - AACAT
                                                                                                TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACAT
                                                                                                                                                                                              AADTCTAWCTGTAWTTAAAGATGTGRCAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACAGGTATGTGACAAATGGGAARVRAAABCCAAATAATAAAGTGACATATTGGTGTTC
                         TGACAGGTATGTGACAAATGGGAARVRAAABCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol type="unassigned DNA"
/db xref="raxon:9606"
/noTe="EMBL/GenBank Accession
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     j. .396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:21441761
                                                                                                                                                                                                                                                                                                                                                                         82.0%;
91.0%;
                                                                                                                                                                                                                                                                                                                                                            Score 300; DB 6; Length 396; Pred. No. 5.3e-51; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   396 bp I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                 No. D60769"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vockley, J.G
```

ω --

Gaps

304

6

120

240

185

7 360 67 300 126 180 245 PAT

14-JUN-2002

```
JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC106612/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CEYWORDS
                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                        Allen, C., Allen, M., Retzer, M., Lee, ADTamacon, S., Adams, C., Allen, V., Carter, M., Barnstead, M., Benahmed, F., Bladwald, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., Brahlmed, F., Blawald, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., M., Allen, V., Chen, S., Chu, J., Chare, J., Chare, J., Chen, G., Chen, G., Chen, R., Chen, Y., Chen, Z., Chen, J., Chare, J., Cher, J., Chare, J., Chen, G., Chen, R., Chen, Y., Chen, Z., Chen, J., Chare, J., Chen, G., Chen, R., Chen, R., Chen, Y., Chen, Z., Chen, J., Chen, R., Chen, R., Chen, R., Chen, Y., Chen, Z., Chen, J., Chen, G., Chen, R., Chen, R., Chen, Y., Chen, Z., Chen, J., Chen, G., Chen, R., Chen, R., Chen, Y., Chen, J., Chen, G., Chen, R., Chen, Y., Chen, J., Chen, G., Chen, R., Chen, R., Chen, J., Chen, J., Chen, G., Chen, R., Chen, R., Chen, Y., Chen, J., Chen, G., Chen, R., Chen, R., Chen, J., Jackson, A., Hernandez, R., Hadder, S., Haddin, S.L., Hodgen, A., Hoguen, A., Hoguen, A., Haddin, S.L., Hodgen, A., Hoguen, A., Haddin, S.L., Hodgen, A., Hoguen, A., Hoguen, A., Haddin, S.L., Hodgen, A., Hoguen, A., Hoguen, A., Haddin, S.L., Lin, J., Liu, J., Louse, J., King, L., Kovat, C., Karpathy, S., Kally, S., Kally, S., Kally, S., Kaln, Z., King, L., Kovat, C., Karpathy, S., Kally, S., K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Muzny, D. Marie., Metzker, M. Lee., Abramzon, S., Adams, C., Alder, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_ENRICHED Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus clone CH230-175A5,
                                                                                                                            Unpublished
                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 252055)
                                                                                                (bases 1 to 252055)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .2.5 GI:30579444
(12-JAN-2002) Human Genome Sequencing Center, Department
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252055 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *** SEQUENCING IN PROGRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                          misc_feature
                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                      Bource
```

Center: Baylor College of Medicine
(Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
Contact: hgsc-help@bcm.tmc.edu
Center project name: GLRO
Center project name: CH230-175A5
Center clone name: CH230-175A5
Center clone name: CH230-175A5
Consenbly program: Atlass 3.0;
Consenbly program: Atlass 3.0;
Consensus quality: 216498 bases at least Q40
Consensus quality: 220368 bases at least Q30
Consensus quality: 223168 bases at least Q30
Consensus quality: 223168 bases at least Q30
Consensus quality: 223168 bases at least Q30
Consensus quality: C23168 bases at least Q30
Consensus quality: C23168 bases at least Q30
Consensus quality: C33038; sum-of-contigs estimation
Quality coverage: 6x in Q20 bases; sum-of-contigs estimation
Quality coverage: 6x in Q20 bases; sum-of-contigs estimation

arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft data.html).

NOTE: This is a 'working draft' sequence. It currently consists of 6 contigs. The true order of the pieces is not known and their order in this sequence record is be preserved 243682 243782 246527 247528 247628 245086 246427 244986 end\_sequ 240925. /note="clone\_boundary
clone\_end:T7
site:EcoRI site:EcoRI /note="clone\_boundary clone\_end:Sp6 /clone="CH230-175A5" /mol\_type="genomic DNA /db\_xref="taxon:10116" 243681: contig of 243681 bp in length
243781: gap of unknown length
244985: contig of 1204 bp in length
244985: gap of unknown length
246426: contig of 1341 bp in length
246526: gap of unknown length
247527: contig of 1010 bp in length
247527: gap of unknown length
247627: gap of unknown length
24934: contig of 1307 bp in length
24934: gap of unknown length
249034: gap of unknown length
249034: gap of unknown length organism="Rattus norvegicus" \_sequence:BH351404" .241490 Qualifiers

```
REMARK
                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                             JOURNAL REFERENCE
                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
AF387809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 279; Conserv
                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    230154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   230326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     230496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CCCTTAACCTGTCTTCAAAAGTTGCATATAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                 Direct Submission
Submitted (25-OCT-2001) Institut d'Embryologie Cellulaire e
Moleculaire, CNRS et College de France, 49 bis, Ave. de la
Gabrielle, Nogent Sur Marne 94130, France
                                                                                                                                                                                  Submitted (01-JUN-2001) Institut d'Embryologie Cellulaire et Moleculaire, CNRS et College de France, 49 bis, Ave. de la Belle Gabrielle, Nogent Sur Marne 94130, France 3 (bases 1 to 4708)
Labastie,M.-C. and Samson,J.
                                                                        Sequence update by submitter
On Oct 25, 2001 this sequence version
Location/Qualifiers
                                                                                                                                                                                                                                                                                                      Kertesz,N., Samson,J., Debacker,C., Wu,H. and Labastie,M.-C. Cloning and characterization of human and mouse SNXK sucrose non-fermenting protein (SNF-1)-related kinases Gene 294 (1-2), 13-24 (2002)
                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus (bases 1 to 4708)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complete cds.
AF387809
                                                                                                                                                                                                                                                                                                                                                                                                                   Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AF387809 4708 bp mRNA linea
Mus musculus strain BALB/c SNF-1 related kinase
                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                            2 (bases 1 to 4708)
Labastie, M.-C. and Samson, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AF387809.2 GI:16418486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGACAGGTATGTGACAAATGGGAAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATCAACTGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCCTCATTGTGTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAGCCTGAACTAAGATGTCTGAGGAGTCAGAGTTGGTGTGTCT---GAGAGCATACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAAAGT-----CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAAT 230149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACAGGTATGTGACAGATGGGAAATAA---TCTAATAATAAAGTGACATACTGGTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCAGCCGA-TTGGTCAGCTGCCTCTAGT-CTGGCCAGTCTTTTTCCTTGTGTGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATAGCTGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCTAACCTGTCTTCAGAAGTCACATAGAGTTACAGTAGTGTATAAATTAAATATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                   musculus
                                                                                                                                                                                                                                                                                                                                                                                                                              musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                            /organism="Mus musculus"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      end_sequence:BH351402"
                  strain="BALB/c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 149.6; DB 2
Pred. No. 4.2e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
                                                                                         replaced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels 18; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 252055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                         gi:15420742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Snrk)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROD 13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                      et
a Belle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             230155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     230212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 230270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            230327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  230437
REFERENCE
AUTHORS
TITLE
                                                                          SOURCE
ORGANISM
                                                                                                                                                                                              RESULT 14
AL672224
                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                        KEYWORDS
                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SdC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                  4538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4373
                                                                                                                                                                                                                                                                                                                        4597
                                                                                                                                                                                                                                                          4656 -- TCCAATAATAAAGTGACATACTGATGTTCAGCAAT 4690
                                                                                                                                    AL672224
1 (bases 1 to 162162)
Lovell, J.
Direct Submission
                                                                                                                                                                AL672224 162162 bp DNA linear ROD Mouse DNA sequence from clone RP23-360E14 on chromosome
                                                                          Mus musculus (house mouse)
                                                                                                         HIG.
                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                       AL672224.15
                                                                                                                                                                                                                                                                               ATCCAAATAATAAAGTGACATATTGGTGTTCAGCAAT 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PASCCHVI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4662. .4667
/gene="Snrk"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /dev_stage="12.5 dpc"
1. .4708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tissue_type="yolk sac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="SNRK"
                                                                                                                       GI:22552833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36.1%;
72.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 132.2; DB 10;
Pred. No. 3.1e-17;
0; Mismatches 73;
```

```
90 GIGTATATATATATATATTATGTACTTCTGGCAATTCTATCTGTATTTAAAGATGTGACAA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30 AGTTACAGTAGTGTATAAATTAAATATTGTGGAAAAACAGTCTTGTATTTTTCTGTATGT 89
                                           TGCTGGTTGATTTCCCCTCATTGTGTAAACATTGACAGGTATGTGACAAATGGGAAAAAAA 329
                                                                                                                                                               CCAGAGTTGGTATGTGCTGAGAACACAAACTTGTCAGCT-AATTGGTCAGATGCCTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTATATATATATATGTACTTCTGG-AATTCTATCTGTATTTAAAGATGTGACAA
TTCTGACCAGTCTTTTTCCTTGTGAGACATTGACAGGTATGTGACAGATGGGAAATAA-
                                                                                                                                                                                                                                             ANAATTGATGTGTGTTAAGAGGGTACAGAATTATCAACTGATTTGGTCAGTTGCTTCCAA
                                                                                                                                                                                                                                                                                                                           TCTTGACACCAATTTTAA-----TAGTCATGAGCCTGAACAAAGATGTCCTAGAG
                                                                                                                                                                                                                                                                                                                                                                                   TCTTGACACCAATTTTAAGAATAGCTGTGAGACCGAATTAAAGATAATCCCTACCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTTACAGTAGTGTATAATTAAATATTGTGGGAAAGTTAGTCTTGTATTTTTC----TGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
/product="SNP-1 related kinase"
/product="SNP-140.1"
/db_xref="GI:154207440.1"
/db_xref="GI:15420743"
/translation="MAGPRRGYDGKIAGLYDLDKTLGRGHFAVVKLARHYFTGEKVAV
KVIDKTKLDTLATGGILFQEVGKLTQHPNIVRLYBVLDTQTKLYLILELGDGGDMFD
YIMKHEEGLLEDLAKKYFAQIVHAISYCHKLHVVHRDLKPENVVFFEKQGLVKLTDFG
FSNKFQPGKKLTTSCGSLAYSAPEILLGDEVDAPAVDIWSLGVILFMLVCGQPPFQBA
NDSETLIMIMDCKYTVPPRVSAGCRDLITRMLQRDPKRRASLBEIESHBWLQGVDPSP
ATKYNIFLVSYKNLSEEEHNSIJQRRQSWFTKIDVFQDLEDDLTATFLSHATVPQSPA
RAGDNVLNGHRSKGLCDPAKKDELFELAGPALSTVPPPASMKPAASGRKCLFRVEEDEE
EDEEDKKVPSLSTQVVLRRKBSVTNRLTSRKSAPVLNQIFEEGESDDEFDMDENLPFK
LSRLMNIAAFPGTVHKRYHRRKSQGRGSSCSSSETSDDSKSRRRLDSGAYSUMFR
RDSSEGPPGSEGDGGGQSKPSSGGGGVDKAS PGEGGTGGGSGGGTPSGTAGSSRRC
AGPDSSSSPSAASAAPRGAELVQSLKLNSLCLGSQLHGAKYILDPKALFSSVKYQB
KSTMKNCISAPGPSPSADLDPVRTKKLRNNALQLPLCEKTISVNIQRSRKEGLLCASS
KSTMKNCISAPGPSPSADLDPVRTKKLRNNALQLPLCEKTISVNIQRSRKEGLLCASS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                               4596
                                                                                                                                                                                                                                                 269
                                                                                                                                                                                                                                                                                                                                    4537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4428
                                                                                                                                                                                                                                                                                                                                                                                                                 209
```

×

29-AUG-2002

```
RESULT 15
AC121264
                                                                                                                                                                                                                                                                                                                                                                                                                                                        გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                            δ
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                         66615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66506 GTGTATATATATATATTATGTACTTCTGG-AATTCTATCTGTATTTAAAGATGTGACAA 66564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66450
                                                                                                                                                                                                                                                                                                                                                                                                                                                              150
                                                                                                                                                                                                                                                                                                                                                   210 AAAATTGATGTGTGTTAAGAGGGTACAGAATTATCAACTGATTTGGTCAGTTGCTTCCAA 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases: Em:, EMBL; Sw:, SWISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from the RPCI-23 Mouse PAC Library

constructed by the group of Pieter de Jong.

constructed by the group of Pieter de Jong.

constructed details see http://www.chori.org/bacpac/home.htm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  During sequence assembly data is compared from overlapping clones. Where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              http://www.Banger.ac.uk/Projects/C_elegans/wormpep RP23-360E14 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Web site: http://www.sanger.ac.uk
Contact: humquery@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cambridgeshire, CB10 1SA, UK. E-mail enquiries: humquery@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (28-AUG-2002) Wellcome Trust Sanger Institute, Hinxton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center code: SC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center: Wellcome Trust Sanger Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           On Aug 30, 2002 this sequence version replaced gi:22415879.
                                                                                               --TCCAATAATAAAGTGACATACTGATGTTCAGCAAT 66767
                                                                                                                                                                                                                                 TGCTGGTTGATTTCCCTCATTGTGTAAACATTGACAGGTATGTGACAAATGGGAAAAAAA 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGTATATATATATATATGTACTTCTGGCAATTCTATCTGTATTTAAAGATGTGACAA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTACAGTAGTGTATAATTAAATATTGTGGGAAAGTTAGTCTTGTATTTTTC----TGT 66505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTTACAGTAGTGTATAAATTAAATATTGTGGAAAAAACAGTCTTGTATTTTTCTGTATGT 89
                                                                                                                                                    ATCCAAATAAAAGTGACATATTGGTGTTCAGCAAT 366
                                                                                                                                                                                                                                                                                                    CCAGAGTTGGTATGTGCTGAGAACACAAACTTGTCAGCT-AATTGGTCAGATGCCTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                         TCTTGACACCAATTTTAA-----TÄGTCATGÄGCCTGAACAAAGATGTCCTÄGÄG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTTGACACCAATTTTAAGAATAGCTGTGAGACCGAATTAAAGATAATCCCTACCAAGTG
                                                                                                                                                                                                 TTCTGACCAGTCTTTTTCCTTGTGTGAACATTGACAGGTATGTGACAGATGGGAAATAA- 66732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA
/db_xref="taxon:10090"
/chromosome="X"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="RP23-360E14"
/clone_lib="RPCI-23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .162162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36.1%;
72.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 132.2; DB 10; Length 162162; Pred. No. 1.5e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .2;
.1.5e-17;
73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19; Gaps
                                                                                                                                                                                                                                                                                                      66673
                                                                                                                                                                                                                                                                                                                                                                                                         66614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC121264
```

```
CE 3 (bases t to 194261)

CB 3 (bases t to 194261)

RS Birren, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N., Arachchi, H. M., Barna, N., Bastien, V., Bloom, T., Anderson, M., Arachchi, H. M., Barna, N., Bastien, V., Bloom, T., Anderson, M., Liu, Boukhgalter, B., Camarata, J., Chang, J., Choepel, Y., Collymore, A., Cook, A., Cooke, P., Corum, B., DeArellano, K., Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Faro, S., Ferreira, P., FitzGerald, M., Gage, D., Galagan, D., Hagos, B., Hall, J., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Karatas, C., Landers, T., Levine, R., Kanat, A., Karatas, A., Karatas, A., Karatas, J., Manoning, J., Matthews, C., McCarthy, M., MacConald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., MacConald, P., Major, J., Minova, T., Mlenga, V., Murphy, T., Naylor, J., Manding, J., Matthews, C., McCarthy, M., MacConald, P., Micol, R., Norbu, C., O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Pharkang, P., Pierre, N., Rachupka, A., Ramasamy, U., Raymond, C., Retta, R., Riee, C., Rogov, P., Rachupka, A., Ramasamy, U., Raymond, C., Retta, R., Riee, C., Rogov, P., Spencer, B., Stauge-Thomann, N., Stojanovic, N., Stubbs, M., Tayevers, M., Vassiliev, H., Venkataraman, V.S., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RS Biren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Anderson, S., Barna, N., Camarata, J., Campopiano, A., Chang, J., Chazaro, B., Choepel, Y., Colangelo, M., Colling, S., Collymore, A., Cocke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Cocke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Gard, S., Goyette, M., Graham, L., Grand-Pierre, N., Ginde, S., Gord, S., Goyette, M., Graham, L., Grand-Pierre, N., Ginde, S., Gord, S., Kells, C., LaRocque, K., Lamazares, R., Landers, T., Lehoczky, J., Levine, R., Lindblad-Toh, K., Liu, G., Landers, T., Lehoczky, J., Levine, R., Lindblad-Toh, K., Liu, G., MacCarthy, M., McEwan, P., McKernan, K., Merquis, N., Mencus, L., Mihova, T., Mienga, V., Murphy, T., Naylor, J., Nyuyen, C., Nicol, R., Norbu, C., Norman, C.H., O'Comor, T., O'Donnell, P., O'Neil, D., Oliver, J., Pettra, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Raymond, C., Retta, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Roman, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schupback, R., Stanus, N., Subramanian, A., Travis, N., Treidio, J., Vassiliev, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W. J., Young, G., Direct, Submission
Birren, B., Nusbaum, C., Lander, B., Abouelleil, A., Allen, N., Anderson, M., Anderson, S., Arachchi, H.M., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Boukhgalter, B., Camarata, J., Chang, J., Choepel, Y., Collymore, A., Cook, A., Cooke, P., Corum, B., Choepel, Y., Collymore, A., Cook, A., Cooke, P., Corum, B., Choepel, Y., Collymore, A., Cooke, P., Corum, B., Choepel, Y., Collymore, A., Cooke, P., Corum, B., Choepel, Y., Collymore, A., Cooke, P., Corum, B., Choepel, Y., Cooke, P., Corum, B., Cooke, P., Corum, B., Choepel, Y., Cooke, P., Corum, B., Chang, J., Choepel, Y., Cooke, P., Corum, B., Choepel, Y., Cooke, P., Coo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (11-MAR-2004) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (16-MAY-2002) Whitehead Institute/MIT Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus chromosome 9, clone RP24-233F22, complete sequence. AC121264 AC121264.8 GI:46360003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Research,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 194261)
Birren,B., Nusbaum,C. and Lander,B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus chromosome 9, clone RP24-233F22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 194261)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 194261)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320 Charles Street, Cambridge, MA 02141, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eutheri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rođentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194261 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02141,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ROD 13-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Murinae; Mus
```

```
Submitted (13-APR-2004) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Apr 13, 2004 this sequence version replaced gi:45356220. All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/RepeatMasker.html Center: Whitehead Institute/MIT Center for Genome Research Center code: WIBR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Levine, R., Lindblad-Toh, K., Liu, G., Liu, X., Lui, A., Mabbitt, R., MacLean, C., Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., Meldarim, J., Meneus, L., Mihova, T., Milenga, V., McCarthy, M., Maylor, J., Nguyen, C., Mihova, T., Nicol, R., Norbu, C., O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Rachupka, A., Ramasamy, U., Raymond, C., Petta, R., Rise, C., Rogov, P., Roman, J., Schauer, S., Schupback, R., Seaman, S., Severy, P., Smith, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Stubbs, M., Talamas, J., Tesfaye, S., Theodore, J., Stojanovic, N., Stubbs, M., Talamas, J., Tesfaye, S., Theodore, J., Vo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zodv M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zimmer, A. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Web site: http://www-seq.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of the sequence contained within base pairs 175167 to the be clone was stolen from accession AC108846 [WICGR Project
     /rpt_family="B2 Mm2"
complement(6076. .624:
/rpt_family="B3"
6256. .6283
                                                                                                                                                                        /rpt_
                                                                               /rpt
5892
                                                                                                                                                                                                                              /rpt
4992
                                                                                                                                                                                                                                                                   /rpt
                                                                                                                                                                                                                                                                                                                                         complement (3470. .35
/rpt_family="PB1D10"
complement (3571. .36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="wgs_end_extension
clone_end:SP6"
                                                                                                                                   dz/
                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                             ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                        ž,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Mus musculus"
|mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       clone="RP24-233F22"
| clone_lib="RPCI-24 Male Mouse BAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chromosome="9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _family="RMER17B"
                                                                                                                                                                                                                                                                                                                        family="MIR"
                                                                                              _family="B4A"
                                                                                                                lement (5179. .5245)
family="RSINE1"
lement (5253. .5452)
                                                                                                                                                                                                                                                _family="ID3"
                                                                                                                                                                                                                                                                                     _family="(CTGGGG)n"
                                                                                                                                                                                                                                                                                                                                                                                                 lement(3175. .3404)
_family="B3A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _family="PB1D10"
                                                                                                                                                                                        Lement (5025.
                                                                                                                                                                                                         family=" (TATATG) n"
                                                                                                                                                         family="B4A"
ement (=777
                                                                                                                                                                                                                                                                                                                                                                                                                                      family="PB1D9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 700)
                                                                                                                                                                                                                                                                                                                                           .3687)
                                                                                                                                                                                                                                                                                                                                                                                .3539)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              end
                                                                                           S
                                                          밁
                                                                                                                                   밁
                                                                                                                                                                  8
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                         42268 AGTTACAGTAGTGTATAATTAAATATTGTGGGAAAGTTAGTCTTGTATTTTTC----TGT
                                                                                                                               42324 GTGTATATATATATATATGTACTTCTGG-AATTCTATCTGTATTTAAAGATGTGACAA
210 AAAATTGATGTGTGTTAAGAGGGGTACAGAATTATCAACTGATTTGGTCAGTTGCTTCCAA 269
                                                                                                                                                                                                                                                                                     245;
                                                                                                                                                         90 GTGTATATATATATATATGTACTTCTGGCAATTCTATCTGTATTTAAAGATGTGACAA 149
                                                                                                                                                                                                                                  30 AGTTACAGTAGTGTATAAATTAAATATTGTGGAAAAACAGTCTTGTATTTTTCTGTATGT 89
                                                        TCTTGACACCAATTTTAA-----TAGTCATGAGCCTGAACAAAGATGTCCTAGAG
                                                                               TCTTGACACCAATTTTAAGAATAGCTGTGAGACCGAATTAAAGATAATCCCTACCAAGTG
                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_family="ID_B1"
complement(17814. 17997)
/rpt_family="B3"
complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt_family="111237"
complement(17171. .17237)
/rpt_family="B1F"
/rpt_family="17173. .17242)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt family="PB1D10"
complement(16942. .17023)
/rpt family="B4A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /rpt_family="AT_rich"
6750. .6812
/rpt_family="ID3"
                                                                                                                                                                                                                                                                                                                                                          /rpt_family="(TTTG)n"
complement(23196..23
                                                                                                                                                                                                                                                                                                                                                                                               /rpt_family="
22476. .22510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /rpt_famil
21394. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         complement (17138. .17148)
/rpt_family="B1F"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_family="ID_B1" complement(16919. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /rpt_family="(CATA)n"
21181. .21260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16596.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rpt_family="GA-rich"
|6508. .16530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1dt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rpt_family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rpt_family="RMER1B"
10897. .10950
                                                                                                                                                                                                                                                                                                    36.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     _family="(CA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    family="B1_MM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _family="(TCC)n"
                                                                                                                                                                                                                                                                                                                                                                                                                 _family="(TG)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     family="PB1D10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family="(GAAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _tamil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     family="L1MC/D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family="L1MC/D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="AT_rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family="(TG)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .y=" (CA) n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .y="PB1D9"
                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                               Score 132.2; DB 10;
Pred. No. 1.5e-17;
0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                              .23272)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .17010)
                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                      Length 194261;
                                                                                                                                                                                                                                                                                   19;
                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                           42323
                                                                                              209
                                                                                                                                 42382
                                                          42432
                                                                                                                                                                                                                                                                                     ű
```

FEATURES

L21006].

source

misc\_feature

repeat\_region repeat\_region

repeat\_region

COMMENT TITLE JOURNAL

Search (	문	ş	뭣	ş	망
complet e : 204	42551	330	42492	270	42433
Search completed: January 31, 2005, 16:38:39 Job time : 2043.02 secs	42551TCCAATAAAAGTGACATACTGATGTTCAGCAAT 42585	330 ATCCAAATAAAGTGACATATTGGTGTTCAGCAAT 366	42492 TTCTGACCAGTCTTTTTCCTTGTGTGAACATTGACAGGTATGTGACAGATGGGAAATAA- 42550	270 TGCTGGTTGATTTCCCTCATTGTGAAACATTGACAGGTATGTGACAAATGGGAAAAAAA 329	42433 CCAGAGTTGGTATGTGCTGAGAACACAAACTTGTCAGCT-AATTGGTCAGATGCCTCTAG 42491

This page Blank (uspto)

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum |
Maximum |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched
                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BB BB
386.4
386.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq
eq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length: 0
length: 2000000000
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      January 31, 2005, 09:45:33 ; Search time 2159.47 Seconds (without alignments) 8496.727 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-996-630A-10_COPY_3800_4187
                                                                                                                                                                                                                                                                                                                                                                       100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4526729 seqs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                   100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenEmbl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tgtccctggccatccatgtg.....tttaaataaaagtggcctgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9b_pl:

9b_r:

9b_sr:

9b_sr:
4248
4248
169072
4219
4254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pat:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ov:*
                                                                                                                              4186
4187
4187
4187
4187
4187
4187
4202
4248
4248
4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Buran
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapext 1.0
AX743697
BD272343
AX026418
BD272342
AX306617
AX334630
AX408962
AX408968
BD18676840
AX628386
AF261758
AX628386
AF261758
BD186769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9053458
                   CQ776643 Sequence
CQ776840 Sequence
AX026416 Sequence
AX828386 Sequence
AR261758 Homo sapi
AC009946 Homo sapi
BD186769 Nucleic a
                                                                                                                                                                                                     AX026417 Sequence
AX334630 Sequence
AX408962 Sequence
AX828407 Sequence
D13643 Homo sapien
BC004375 Homo sapi
                                                                                                                                                                                                                                                                                                                                                                                          AX743697 Sequence
BD272343 Methods o
AX026418 Sequence
BD272342 Methods o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
```

	Ω					O	ი					ი	ი	ი	a	a							Ω	G	ი
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
39.8	40	40	40	41.2	78.2	91	91	94.8	96.2	97.8	98.4	102	123.8	135.6	156	156	176	176	284.2	295.4	315	353.2	378.2	378.2	384.8
10.3	10.3	10.3	10.3	10.6	20.2	23.5	23.5	24.4	24.8	25.2	25.4	26.3	31.9	34.9	40.2	40.2	45.4	45.4	73.2	76.1	81.2	91.0	97.5	97.5	99.2
197793	268715	244504	228824	6255	3836	167	167	4017	211500	1464	246011	838	557	465	424	424	2488	2488	497	4094	688	689	740	740	155925
۵	N	ν	N	o	6	σ	δ	10	2	10	10	4	σ	σ	Φ	6	9	σ	σ	σ	9	9	6	σ	9
AC141340	AC121488	AC113729	AC137163	AX346931	BD235746	CQ511319	CQ502456	AK129036	AC117905	BC055923	AL929585	AY652747	CQ472141	CQ481310	BD026031	AX886421	AK094110	AX832893	CQ696938	BD235747	AY369805	AY369804	BD097430	BD083783	AC096536
AC141340 Rattus no	AC121488 Rattus no	AC113729 Rattue no	AC137163 Rattus no	AX346931 Sequence	BD235746 Hypoxia r	CQ511319 Sequence	CQ502456 Sequence	AK129036 Mus muscu	AC117905 Rattus no	BC055923 Mus muscu	AL929585 Mouse DNA	AY652747 Bos tauru	CQ472141 Seguence	CQ481310 Sequence	BD026031 Sequence	AX886421 Sequence	AK094110 Homo sapi	AX832893 Sequence	CQ696938 Sequence	BD235747 Hypoxia r	AY369805 Macaca mu	AY369804 Pan trogl	BD097430 Nucleic a	BD083783 Nucleic a	АС096536 Ното варі

ALIGNMENTS

## REFERENCE AUTHORS VERSION KEYWORDS SOURCE ORGANISM RESULT 1 AX743697 LOCUS DEFINITION ACCESSION 밁 Ś 문 S FEATURES Best Loc Matches TITLE JOURNAL Query Match source Local Sim 1930 1990 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA 121 61 Yue, H., Tang, Y.T., Nguyen, D.B., Yao, M.G., Xu, Y., Tribouley, C.M., Sanjanwala, M.S., Walia, N.K., Baughn, M.R., Sapperstein, S.K., Lal, P., Thornton, M., Gandhi, A.R., Ramkumar, J., Eliott, V.S., Arvizu, C., Thangavelu, K., Gietzen, K.J., Ding, L., Au-young, J., Tran, B., Policky, J.L., Lee, S., Lu, D.A.M., Burford, N., Warren, B.A., Gururajan, R., Duggan, B.M., Honchell, C.D. and Hafalia, A.J.A. Secreted human proteins Patent: WO 0226982-A 80 04-APR-2002; Incyte Genomics Inc. (US) Sequence 80 from Patent AX743697 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Homo sapiens Homo sapiens (human) AX743697.1 GI:30722372 AX743697 Similarity TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 180 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTTCTTGGCTGCA TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT Conservative /organism="Homo sapiens" /mol\_type="genomic DNA" /mol\_type="genomic ONA" /db\_xref="taxon:9606" /noTe="Incyte ID No: 1519324CB1" 100.0%; Score 388; DB 6; 100.0%; Pred. No. 8.6e-116; tive 0; Mismatches 0; 2339 bp : WO0226982. DNA Length 2339; Indels linear PAT 14-MAY-2003 0, Gaps 2049 120 1989 60 0

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
BD272343
LOCUS
  밁
                       Ś
                                                                                                   ORIGIN
                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                              Query Match
Best Local Similarity
Matches 388; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                    source
                                                                                                                                                                      ROGER NITSCH, ISABELL GREEVE

OS Homo sapiens (human)

PN JP 2002530076-A/3

PD 17-SEP-2002

PR 12-NOV-1998 EP 98121478.6

PI ROGER NITSCH, ISABELL GREEVE

PC C12N15/09, A61K38/00, A61K39/395, A61K45/00, A61K48/00, PC A61P1/00, PC A61P1/00, A61P15/00, A61P15/00, A61P25/10, A61P25/16, PC A61P1/00, A61P15/00, A61P15/00, A61P21/00, A61P25/14, A61P25/16, PC A61P15/00, A61P15/00, A61P21/00, A61P25/10, C12Q1/ PC A61P43/00, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, C12Q1/ PC A61P43/00, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, C12Q1/ PC G1 diagnosing or treating neurological diseases and CC Cc degeneration

PH Key

1. 4186

PT Source / 1. 4186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2170
   3799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD272343.1 GI:33082111
JP 2002530076-A/3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 4186)
Nitsch,R. and Greeve,I.
Methods of diagnosing or treating neurological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: JP 2002530076-A 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                        degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods of diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
             TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGATATTACTGAAAGGGAGGGGTGGAATATTTT
TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTTCTGTTTAAATAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACAGCCACAGGCACTGTGTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTTTCTTTCGTTCATGGGGGGCCAAGGAGAAGGCATGAATCTTCCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                               /organism='Homo
Location/Qualifiers
                                                                                                            /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                    .4186
                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4186 bp
or treating
                                                Score 388; DB 6; 1
Pred. No. 9.2e-116;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neurological diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                      Length 4186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT
                                                <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-2003
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cell
3858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2109
                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
AX026418
                            Ş
                                                            밁
                                                                               8
                                                                                                            밁
                                                                                                                                  Ś
                                                                                                                                                            밁
                                                                                                                                                                                  Ś
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
         밁
                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rocus
                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                            3919
                                                                                                                                                                                                               3799
           4039
                                                            3979
                                                                                                                                                               3859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3859
                                                                                                                                      121
                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                      61
                                                                                                                                                                                                                                      ب
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 388; Conserv
301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX026418
Sequence 4 from F
AX026418
AX026418.1 GI:10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods of diagnosing or treating r
Patent: EP 1002862-A 4 24-MAY-2000;
NITSCH ROGER M PROF DR (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; |
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                            TGAAGGITTTCTTTAGAATCAGAATTGTAGCCAGITTTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                                                                                                                                                                                     GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCCGTGGCTGTGGGGCCGC
                                                                    ATTTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                       TGGATATTACTGAAAGGGAGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                              GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                   TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGATATTACTGAAAGGGAGGGGTGGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                           ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                              TGGATATTACTGAAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                       TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTTCTGTTTAAATAAAGTGGCCTGG 4186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 388; DB 6; ilarity 100.0%; Pred. No. 9.2e-116; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNJ
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .4186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:10187648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4186 bp
Patent EP1002862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                   3858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                              3918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3918
360
                                           4098
                                                                                    300
                                                                                                                                4038
                                                                                                                                                                                                                       3978
                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3978
                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                  밁
                                                                                                                                          Ś
                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
BD272342
LOCUS
                                      ঠ
                                                                 밁
                                                                                      Ś
                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                밁
                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                       Query Match
Best Local S
Matches 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROGER NITSCH, ISABELL GREEVE
OS 'Homo sapiens (human)
PN 19 2002530076-A/2
PD 17-SEP-2002
PF 12-NOV-1999 JP 2000582553
PF 12-NOV-1998 EP 981211478.6
PI ROGER NITSCH, ISABELL GREEVE
PC C12N15/09, A61K38/00, A61K39/395, A61K39/395, A61K45/00, A61K48/00,
PC A61P1/00, A61P15/00, A61P21/00, A61P25/00, A61P25/14, A61P25/16,
PC A61P25/28,
PC A61P25/28,
BC A61P43/00, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, C12Q1/ PC
                                                                  3920
                                                                                                                                                                       3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4099
                                                                                                                   3860 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA 3919
                                        181
                                                                                            121
                                                                                                                                                                                                                                                                                                                                                        PH CCell 68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                          388;
                                                                                                                                             61
                                                                                                                                                                                                -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 4187)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD272342.1 GI:33082110 JP 2002530076-A/2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                degeneration.
BD272342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD272342
4187 bp
Methods of diagnosing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: JP 2002530076-A 2 17-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods of diagnosing or treating neurological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nitsch, R. and Greeve, I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                      Similarity
                                                                                                                                   GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTTCTTGGCTGCA 120
                                                                              TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                    TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT 3859
                             TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTTCTGTTTAAATAAAAGTGGCCTGG
              TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT 4039
                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosing or treating neurological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                       G01N33/53,G01N33/53,C12N15/00,C12N5/00,A61K37/02 CC
                                                                                                                                                                                                                      100.0%; Score 388; DB 6; 1 larity 100.0%; Pred. No. 9.2e-116; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A61P1/00,
A61P11/00,A61P15/00,A61P21/00,A61P25/00,A61P25/14,A61P25/16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-NOV-1999 JP 2000582553
12-NOV-1998 EP 98121478.6
ROGER NITSCH,IGABELL GREEVE
CLEN15/09,A61K38/00,A61K39/395,A61K39/395,A61K45/00,A61K48/00,
                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                degeneration
                                                                                                                                                                                                                                                                                                                         /organism='Homo sapiens
Location/Qualifiers
                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA linear PAT 17-i neurological diseases and
                                                                                                                                                                                                                                                 Length 4187;
                                                                                                                                                                                                                                                                                                                                                        (human)'.
                                                                                                                                                                                                                       <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUL-2003 and cell
                                                               3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4158
RESULT 6
AX334630
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
AX026417
LOCUS
DEFINITION
ACCESSION
                                                                                               ર્
                                                                                                                               밁
                                                                                                                                                      8
                                                                                                                                                                                밁
                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                           딹
                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                              4160
                                                                                                                                 4100
                                                                                                                                                                                4040
                                                                                                                                                                                                                                     3980
                                                                                                                                                                                                                                                                                       3920
                                                                                                                                                                                                                                                                                                                                           3860
                                                                                                                                                                                                                                                                                                                                                                                                3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4040
                                                                                                     361
                                                                                                                                                         301
                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                 388;
                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                       _
 Sequence
             AX334630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX026417.1
  5139
```

```
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4187 bp Sequence 3 from Patent EP1002862. AX026417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods of diagnosing or treating neurological Patent: EP 1002862-A 3 24-MAY-2000; NITSCH ROGER M PROF DR (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 100.0%; Score 388; DB 6; Similarity 100.0%; Pred. No. 9.2e-116; 88; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                        TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                   ATTTTCTTCTTTGGTCATGGGGGCCAAGGAAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                          TGGATATTACTGAAAGGGAGGGGTGGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                    TGAAGGITTTCTTTAGAATCAGAATTGTAGCCAGITTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT 3859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTTCTTTGGTCATGGGGGCCAAGGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                           TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                              TACAGCCACAGGCACTGTGTCTACTGTC
                                                                                                                                                                                                                                                                                TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                          TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
TECTTCTCTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                      ATTTTCTTCTTTGGTCATGGGGGCCAAGGAAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTCTGTTTAAATAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCCTGTCAGGCTCT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1. .4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:10187647
                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4187
4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                          360
                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                          3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 3919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4099
                                                                                                                                                                                      4099
                                                                                                                                                                                                                                                                                  4039
                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4159
                                                                                              4159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

from

4187 bp I Patent WO0194629.

DNA

linear

PAT

09-JAN-2002

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                         RESULT 7
AX408962
LOCUS
                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                          FEATURES
                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                         4160
                                                                                                                                                                                                                                                                                                                        4100
                                                                                                                                                                                                                                                                                                                                                                         4040
                                                                                                                                                                                                                                                                                                                                                                                                                             3980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                   Sequence 160
AX408962
AX408962.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                     Alvares, C., Horne, D., Peres-da-Silva, S. and
Gene expression profiles in liver cancer
Patent: WO 0229103-A 1609 11-APR-2002;
GENE LOGIC INC (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 0194629-A 5139 13-DEC-2001; Avalon Pharmaceuticals (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature
                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                               Homo
                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                        AX408962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX334630.1
                                                                                                                                                                                                                                                                                  TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                     TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                         ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                          ATTTTCTTCTTTGGTCATGGGGGCCAAGGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                           TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGCCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                      TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                      TACAGCCACAGGCACTGTGTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                             1609
Location/Qualifiers
1. .4187
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cocation/Qualifiers
                                                                                                                                                                   GI:21441667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:18125349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                            from
                                                                                                                                                                                             Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 388; DB 6; )
Pred. No. 9.2e-116;
                                                                                                                                                                                            4187 bp I
nt WO0229103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                      4187
                                                                                                                                                                                                                                                                                                388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA"
                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                        linear
                                                                          Vockley, J.G
                                                                                                                                                                                                        PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                        14-JUN-2002
                                                                                                                                                                                                                                                                                                                        4159
                                                                                                                                                                                                                                                                                                                                                                         4099
                                                                                                                                                                                                                                                                                                                                                                                                                          4039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3859
                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 8
AX828407
                 5
                                               멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
맑
                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                              Snoor
                                                                                                   Matches
                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                        source
3860
```

```
Query Match
Best Local Similarity
Matches 388; Conser
                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3800 TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                   388;
                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                                                                                                                                                                                                                                                                                                                     Al-Mahmood,S., Colin,S. and Schneider,C. Genes involved in regulating angiogenesis, pharmaceutical preparations containing same and applications thereof patent: WO 03074073-A 53 12-SEP-2003; Gene Signal (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX828407.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 53 from AX828407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX828407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                         GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA 120
                                                                      TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                            TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT 300
GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTCTGTTTAAATAAAGTGGCCTGG 4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTTCTTCTTTGGTCATGGGGGGCCAAGGAAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGATATTACTGAAAGGGAGGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                 100.0%; ilarity 100.0%; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; (ilarity 100.0%; )
Conservative 0;
                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DN/
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="EMBL/GenBank Accession
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:39838407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent
                                                                                                                                                   0
                                                                                                                                               Score 388; DB 6; 1
Pred. No. 9.2e-116;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 388; DB 6; 1
Pred. No. 9.2e-116;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4187 bp
WO03074073.
                                                                                                                                                                                                                                                                    DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ.
                                                                                                                                                                                       Length 4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 4187;
                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D13643"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 12-DEC-2003
                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                        3859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3919
 3919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3859
                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
HUMRSC390
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
                                 gene
 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                         3 (bases 1 to 4187)
Ohara, O., Nagase, T., Kikuno, R. and Nomura, N.
Direct Submission
Submitted (11-NOV-1992) Osamu Ohara, Kazusa DNA Research
1532-3, Yana, Kisarazu, Chiba 292-0812, Japan
(B-mail:cdnainfo@kazusa.or.jp, Tel:+81-438-52-3913)
On Dec 22, 1999 this sequence version replaced gi:285996.
Sequence updated (20-Dec.1999).
                                                                                                                                                                                                                                                                                                                                                                                   Nomura, N., Miyajima, N., Sazuka, T., Tanaka, A., Kawarabayasi, Y., Sato, S., Nagase, T., Seki, N., Ishikawa, K. and Tabata, S. Prediction of the coding sequences of unidentified human genes. I The coding sequences of 40 new genes (KIAA0001-KIAA0040) deduced analysis of randomly sampled cDNA clones from human immature myeloid cell line KG-1 (supplement) DNA_REA_1 (1), 47-56 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nomura,N., Miyajima,N., Sazuka,T., Tanaka,A., Kawarabayasi,Y., Sato,S., Nagase,T., Seki,N., Ishikawa,K. and Tabata,S. Prediction of the coding sequences of unidentified human genes. I The coding sequences of 40 new genes (KIAA0001-KIAA0040) deduced analysis of randomly sampled cDNA clones from human immature myeloid cell line KG-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens mRNA for D13643 D13643.2 GI:6630631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KIAA0018 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1584026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTTTCTTTCGTCATGGGGGCCAAGGAAAGGCATGAATCTTCCCTGTCAGGCTCT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 3979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT 4039
/gene="KIAA0018"
<1. .1589
                                                   /cel:
                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="ha005171"
                                                                    /sex="male"
/cell_line=
                                                                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1), 27-35 (1994)
                                                            _line="KG-1"
                                                rype="myoblast"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4187 bp
KIAA0018 p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         partial cds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 06-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                     i.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I.
by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
```

REFERENCE AUTHORS

1 (bases 1 to 4202)
Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.
Klausner, R.D., Collins, F.S., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

RESULT 10 BC004375 LOCUS

BC004375

VERSION KEYWORDS

BC004375.1

GI:13325123 (human)

ORGANISM

Homo

sapiens sapiens

Eukaryota; Metazoa; Mammalia; Eutheria;

Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.

ACCESSION DEFINITION

Homo sapiens 24-dehydrocholesterol reductase, mRNA MGC:10569 IMAGE:3638639), complete cds. BC004375

4202 bp

linear

(cDNA clone PRI 29-JUN-2004

```
S
                                                                                 밁
                                                                                                                         S
                                                                                                                                                                   문
                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
  4160
                                                                                                                                                                     4040
                                                                                                                                                                                                                                                                                                                                             3920
                                       361
                                                                                                                         301
                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 100.
88; Conservative
TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                          TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                          TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC 360
                                                                                                                                                                                              ATTTTCTTTGGTCATGGGGGGCCAAGGAAAGGCATGAATCTTCCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                             TGGATATTACTGAAAGGGAGGGTGGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                      TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA
                                                                                    TACAGCCACA
                                                                                                                                                                                                                                                         TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                     ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                           TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /translation="Repaaltarrrimepavslavcallfilmvrlkglbevlihorw vevcletlelslifdlyyyvaamvvpklssarrimepavslavcallfilmvrlkglbevlihorw vevcletlelslifdlyyyvaamvvpklssarrimepavsuvptlyssarrimepavrdivavetlyssarrimepavrdivavetlyssarrimepavrdivavetlits igmtlevlepidtivgglimetgissskhyglfohictavetlvladgsfvrctese igmtlevlepidtivgglimetgissskhyglfohictavetlvladgsfvrctese nsdlfyappsgcgtlyflyaaeiriipakxyvklrfepvrgleaicakfthesorgen hfvegllysldeavimtgomeptipabesklnsignvykpwffyllylklktnyretleyi plrhyyhrhtrsifwelddiifpgndihypiwlcpfilpsqpglvhpkgneaeividig phrhyyhrhtrsifweldfohilyepolihyppiwlcpfilpsqpglvhpkgneaeividigaysgervkhebarschadlethyfohilyapdcymnrebewemfdgslyhklrek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="KIAA0018"
/note="Start codon is not identified. ha00517 cDN
for KIAA0018 has a 1-bp deletion at the position
the sequence of KIAA0018."
/codon_start=3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LGCQDAFPEVYDKICKAARH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /protein_id="BAA02806.2"
/db_xref="GI:6630632"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="KIAA0018"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             product="KIAA0018 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 388; DB 9; 100.0%; Pred. No. 9.2e-116; ... Mismatches 0;
                                       388
  4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA clone
lon 1167 of
                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3859
                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                             3979
                                                                                                                                                                                                                                                                                                                                                                                                                               3919
                                                                                                                                                                     4099
                                                                                                                                                                                                                                                         4039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Villalon, D.K., Miting, M., Madan, A., Young, A.C., Shevchenko, Y., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Giinwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Steve Jones, Sarah Barber, Mabel Brown-John, Yaron Butterfield, Andy Chan, Steve S. Chand, William Chow, Alison Cloutier, Ruth Featherstone, Malachi Griffith, Obi Griffith, Ran Guin, Nancy Liao Kim MacDonald, Amara Masson, Mike R. Mayo, Josh Moran, Ryan Morin, Teika Olson, Diana Palmquist, Anca Petrescu, Anna Liisa Prahbu, Parvaneh Saeedi, JR Santos, Angelique Schmerch, Ursula Skalska, Duane Smailus, Jeff Stott, Miranda Tsai, George Yang, Jacquie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Preparation: Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. CODNA Sequencing by: Genome Sequence Centre, BC Cancer Agency, Vancouver, BC, Canada info@bcgsc.bc.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (12-MAR-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clone distribution: MGC clone distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            through
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Strausberg,R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 4202)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov IRAL Plate: 13 Row: f Column: 10. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Asim Siddiqui, Rob Holt,
                      /db_xref="LocusID:1718"
/db_xref="MIM:606418"
/db_xref="MIM:606418"
/translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLLPLSL
/translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFGRLTVSL
IFDIYYYVRAWVVFKLSAPRLHEQRVRDIQKQVREWKEQGSKTFWCTGREGWTLFVLPELD
RVGKYKKTHKNIMINLMDILEVDTKKQIVRVEBLVTMGQVTALLTSIGWTLFVLPELD
DLTVGGLIMGTGIESSSHKYGLFQHICTAYELVLADGSFVRCTFPSENSDLFYAVFWSC
GTLGFLVAAEIRIIPAKKYVKLRFEPVRGLEAICAKFTHESQRQENHFVEGLLYSLDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="synonyms: KIAA0018, SELADIN1"
/db_xref="LocusID:1718"
/db_xref="MIM:606418"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
(mol_type="mdNA"
/db xref="taxon:9606"
/clone="MGC:10569 IMAGE:3638639"
                                                                                                                                                                                                                                               protein_id="AAH04375.1"
/db_xref="GI:13325124"
                                                                                                                                                                                                                                                                                                                      /codon_start=1
/product="24-dehydrocholesterol reductase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene="DHCR24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue
                                                                                                                                                                                                                                                                                                                                                                                            gene="DHCR24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .4202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sue_type="Placenta,
ne_lib="NIH_MGC_21"
_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   choriocarcinoma"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Marco Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nancy Liao,
```

CDS

PC G01N33/53,G01N33/53,C12N15/00,C12N5/00,A61K37/02 CC of diagnosing or treating neurological diseases and CC

Methods

COMMENT

TITLE

Ś

밁

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
BD272341
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
ROGER NITSCH, ISABELL GREEVE
OS Homo sapiens (human)
PN JP 2002530076-A/1
PD 17-SEP-2002
PF 12-NOV-1999 JP 2000582553
PF 12-NOV-1999 SE 98121478.6
PI ROGER NITSCH, ISABELL GREEVE
PC C12N15/09, A61K38/00, A61K39/395, A61K49/395, A61K45/00, A61F1/00, A61F1/00, A61F1/00, A61F1/00, A61F1/00, A61F1/00, A61P1/00, A61P1/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (base 1 to 4248)
Nitsch,R. and Greeve,I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: JP 2002530076-A 1 17-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods of diagnosing or treating neurological diseases and cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD272341.1 GI:33082109 JP 2002530076-A/1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              degeneration.
BD272341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Methods of diagnosing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTTCTGTTTAAATAAAAGTGGCCTGG 4184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGGCTGTGGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGATATTACTGAAAGGGAGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVIMTGVMTDEAEPSKLNSIGNYYKPWFFKHVENYLKTNREGLEYIPLRHYYHRHTRS
IFWELDDIIPFGUNDIFRYLFGWMYPFKISLLKLTGGETLRKLYEQHHVVQDMLYPMK
CLQQALHTFGNDIHVYEIMCGPFILPSQPGLVHPKGNEAELYIDIGAYGERVKHFER
RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWEMFDGSLYHKLREKLGCQDAFPEVYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 388; DB 9; 1
Pred. No. 9.2e-116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4248 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurological diseases and cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 4202;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
```

밁 Ś 밁 밁 Ś 밁 Ś 밁 Ş

Ś

120 3920

6

3980

180

4040

240

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
CQ776643
LOCUS
                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                               ORIGIN
                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity Matches 388; Conserv
Query Match
Best Local Similarity
Matches 388; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                         4221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HARCE
Land
                                                                                                                                  pulmonary disease
Patent: EP 1394274-A 329 03-MAR-2004;
Genox Research, Inc. (JP)
Location/Qualifiers
                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
Eukaryota; Merazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                  Ohtani,N., Sugita,Y., Yamaya,M., Kubo,H., Nagai,H. and Izuhara,K. Methods of testing for bronchial asthma or chronic obstructive
                                                                                                                                                                                                                                                                                                                            CQ776643
Sequence 329 from Patent
CQ776643
CQ776643.1 GI:45380033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTTCTTGGCTGCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Silarity 100.0%; For the conservative 0;
100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      degeneration
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism='Homo
                                                                                                                            1. .4248
 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
Score 388; DB 6; 1
Pred. No. 9.2e-116;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 388; DB 6; 1
Pred. No. 9.2e-116;
, Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                           4248 bp
: EP1394274.
                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                          DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388
                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                             Length 4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
 Indels
                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (human)'.
                                                                                                                                                                                                                                                                                                                                                                           PAT 11-MAR-2004
 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
CQ776840
LOCUS
DEFINITION
                                                                                                                       밁
                                                                                                                                                    ঠ
 닭
                        ঠ
                                                           밁
                                                                                    S
                                                                                                                                                                                     맑
                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 388
                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                          3921
                                                                                                                                                                                      3861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3861
 4041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4221
                                181
                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                  388;
                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CQ776840
Sequence 526
CQ776840
CQ776840.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 μ.
                                                                                                                                                                                                                   ۲
                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary disease
Patent: EP 1394274-A 526 03-WAR-2004;
Genox Research, Inc. (JP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ohtani, N., Sugita, Y., Yamaya, M., Kubo, H., Nagai, H. Methods of testing for bronchial asthma or chronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                 TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                             TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                         GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                              GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTTCTTGGCTGCA
                                                                                                                                                                                     TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                          TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
 TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                             TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TECTTCTETTTAAATAAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              526 from Patent
                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                          .4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:45380230
                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                               Score 388; DB 6; Pred. No. 9.2e-116; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4248 bp
: EP1394274.
                                                                                                                                                                                                                                                                                                                                           DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                              Length 4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Izuhara, K. obstructive
```

11-MAR-2004

360

4160 300 4100

0

0

240

4040 180

4100

3980 120 3920

60

밁 á 밁 S 밁 ঠ 밁 S 밁 Ś

S 밁

밁 S

```
RESULT 15
AX828386
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
AX026416
LOCUS
DEFINITION
ACCESSION
  DEFINITION
                                                                                밁
                                                                                                       Ś
                                                                                                                                  B
                                                                                                                                                          Š
                                                                                                                                                                                       g
                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Sim:
Matches 388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                4221
                                                                                                                                    4161
                                                                                                                                                                                         4101
                                                                                                                                                                                                                                            4041
                                                                                                                                                                                                                                                                                                 3981
                                                                                                                                                                                                                                                                                                                                                      3921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4101
                                                                                                                                                                                                                                                                                                                                                                                                       3861 TGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4161
                                                                                                         361
                                                                                                                                                              301
                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                               13
AX828386
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                   μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4248 bp
Sequence 2 from Patent BP1002862.
AX026416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Methods of diagnosing or treating no
Patent: EP 1002862-A 2 24-MAY-2000;
NITSCH ROGER M PROF DR (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX026416.1 GI:10187646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                              TGCTTCTGTTTAAATAAAAGTGGCCTGG
                                                                                                                                                TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                     GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                      ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                        ATTTTCTTTGGTCATGGGGGCCAAGGAGAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                           TEGATATTACTGAAAGGGAGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                             TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGCAGTGTATGCTGTGATTTTT
                                                                                                                                                                                                                                                                                             TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                         TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                  GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCTTCTGTTTAAATAAAGTGGCCTGG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACAGCCACAGGCACTGTGTCTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                    TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTTTCTTTTGGTCATGGGGGCCAAGGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                               TGCTTCTGTTTAAATAAAGTGGCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 388; DB 6; ilarity 100.0%; Pred. No. 9.2e-116; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
sapiens
  32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
 from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .4248
 Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
4248 bp
WO03074073
                                                                                                         388
                                                                                4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neurological diseases
            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4248;
             PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 16-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
             12-DEC-2003
                                                                                                                                  4220
                                                                                                                                                                                       4160
                                                                                                                                                                                                                                           4100
                                                                                                                                                                                                                                                                                                                                                     3980
                                                                                                                                                                                                                                                                                                                                                                                                        3920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4160
                                                                                                                                                             360
                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                              4040
                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                 60
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                             S
                                                                밁
                                                                                          S
                                                                                                                                  밁
                                                                                                                                                            δ
                                                                                                                                                                                                   문
                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 388; DB 6; Best Local Similarity 100.0%; Pred. No. 9.2e-116; Matches 388; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL.
                                                                 4161
                                                                                                                                  4101
                                                                                                                                                                                                   4041
                                                                                                                                                                                                                                                                     3981
                                                                                                                                                                                                                                                                                                                                       3921
4221
                                                                                                                                                                                                                                                                                                                                                                                                      3861 TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                               361
                                                                                                 301
                                                                                                                                                                   241
                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                         1 TGTCCCTGGCCATCCATGTGATGGTTTTTGGATGGAGTTAAACTTGATGCCAGTGGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Al-Mahmood,S., Colin,S. and Schneider,C. Genes involved in regulating angiogenesis, pharmaceut preparations containing same and applications thereof Patent: WO 03074073-A 32 12-SEP-2003; Gene Signal (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX828386
AX828386.1
                 TGCTTCTGTTTAAATAAAAGTGGCCTGG 388
                                                                                                                                                      ATTTTCTTTGGTCATGGGGGGCCAAGGAAAGGCATGAATCTTCCCCTGTCAGGCTCT
                                                                                                                                                                                                                       TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                                        TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                       GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
                                                                                                                                                                                                                                                                                                                                                          GCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCCTCCAGAGCCCTGAGTTTCTTGGCTGCA
TGCTTCTGTTTAAATAAAGTGGCCTGG 4248
                                                                 TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGGCCGC
                                                                                   TACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGTCCCCGTGGCTGTGGGGCCGC
                                                                                                                                  ATTTTCTTCTTTGGTCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCT
                                                                                                                                                                                                   TGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGATTTTT
                                                                                                                                                                                                                                                                     TGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:39838386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                   4220
                                                                                                  360
                                                                                                                                   4160
                                                                                                                                                                   300
                                                                                                                                                                                                     4100
                                                                                                                                                                                                                                                                     4040
                                                                                                                                                                                                                                                                                                                                       3980
                                                                                                                                                                                                                                                                                                                                                                                                       3920
                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                       60
```

Search completed: January 31, 2005, 16:38:28 Job time: 2162.47 secs

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
380.4
362
362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
Match Length DB
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY_NUC :
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-996-630A-10_COPY_1_400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          January 31, 2005, 09:45:33; Search time 2226.25 Seconds (without alignments) 8496.727 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4526729 seqs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenEmbl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggcgcgaacccgcagcgctt....atgatcaacctgatggacat 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gb_pr: * * gb_pr: * * gb_er: * gb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_pat:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ov:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              om: •
4187
41187
41187
41187
41187
42248
42248
42248
42248
42248
42248
42248
42248
42248
42248
                           BD272343

AX026418

BD272342

AX026417

AX334630

AX43962

AX828407

HUMRSC390

BD272341

CQ776643

CQ776640

AX8283166

AF261758

BD235747

CQ725571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9053458
                     D13643 Homo sapien
BD272341 Methods o
CQ776643 Sequence
CQ776840 Sequence
AX026416 Sequence
AX026416 Sequence
AX026416 Sequence
AF261758 Homo sapi
BC011669 Homo sapi
BC01377 Hypoxia r
CQ725571 Sequence
                                                                                                                                                                                                                                                                                                                                   BD272343 Methods o

AX026418 Sequence

BD272342 Methods o

AX026417 Sequence

AX334630 Sequence

AX408962 Sequence

AX408967 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
```

	0	n				a								0	a										
45	44	43	42	41	40		38	37	36	35	34	33	32	<u></u>		29	28	27	26	25	24	23	22	21	20
78	78	78	109.2	109.2	109.2	109.2	135	167.2	168.8	215	215	224.6	224.6	272.8	272.8	272.8	284	284	284	322	323	331	332.6	332.6	362
19.5	19.5	19.5	27.3	27.3	27.3	27.3	33.8	41.8	42.2	53.8	53.8	56.1	56.1	68.2	68.2	68.2	71.0	71.0	71.0	80.5	80.8	82.8	83.2	83.2	90.5
205130	183263	178670	213297	192688	180994	154067	392	1994	2012	262897	211500	246011	3994	169072	155925	425	4219	728	728	1557	3836	1594	4017	1904	1551
٨	9	9	N	N	U	N	9	u	v	N	N	10	10	9	9	9	σ	0	0	6	σ	10	10	10	12
AC105425	AC092685	AC104073	BX323071	BX511260	BX255909	BX649302	AF398336S2	BC074393	BC078029	AC129688	AC117905	AL929585	BX511043	AC009946	AC096536	AF398336S1	BD186769	BD097429	BD083782	AX814446	BD235746	AY039762	AK129036	BC019797	BT007487
AC105425 Homo sapi	Homo	AC104073 Homo sapi	BX323071 Danio rer	_		BX649302 Danio rer	AF398337 Homo sapi			AC129688 Rattus no	AC117905 Rattus no	AL929585 Mouse DNA	BX511043 Mouse DNA	АС009946 Ното варі	AC096536 Homo sapi	AF398336 Homo sapi	BD186769 Nucleic a	BD097429 Nucleic a	BD083782 Nucleic a	AX814446 Sequence	BD235746 Hypoxia r	AY039762 Mus muscu	AK129036 Mus muscu		BT007487 Synthetic
			;			. •.	•	٠		•	•	•				:									

ALIGNMENTS

FEATURES source		JOURNAL	SOURCE ORGANISM REFERENCE AUTHORS TITLE	RESULT 1 BD272343 LOCUS DEFINITION ACCESSION VERSION KEYWORDS
CC degeneration FH Key 14186 FT source /organism='Homo sapiens (human)'. FT Location/Qualifiers 14186 /organism="Homo sapiens" /mol_type="genomic DNA"	PI KOGEK NITSCH, ISBAELL GREEVS PC C12N15/09,A61K38/00,A61K39/395,A61K39/395,A61K45/00,A61K48/00, PC A61P1/00, A61P15/00,A61P21/00,A61P25/00,A61P25/14,A61P25/16, PC A61P25/28, PC A61P25/28, PC A61P25/28, PC A61P25/28, PC BC GC	gen GER	Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.  1 (bases 1 to 4186) Nitsch,R. and Greeve,I. Methods of diagnosing or treating neurological diseases and cell	BD272343 4186 bp DNA linear PAT 17-JUL-2003 Methods of diagnosing or treating neurological diseases and cell degeneration. BD272343 BD272343 BD272343 GI:33082111 JP 2002530076-A/3.

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
AX026418
LOCUS
                                                         Ş
              Ş
                                     B
                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                   밁
                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                               FEATURES
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                  Matches 400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 400;
                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
              121
                                      61
                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                     Patent:
NITSCH F
                                                                                                                                                                                                                                                                                                                                                                                   4186 bp
Sequence 4 from Patent EP1002862.
AXO26418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
                                                                                   \vdash
                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \vdash
                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                   Methods of diagnosing or treating |
Patent: BP 1002862-A 4 24-MAY-2000
NITSCH ROGER M PROF DR (DE)
                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                           AX026418.1
                                                 CCGTGTGCCCCCTCTTCCTGCTGCGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCACCAGCGCTGGGTTCGTGTGCCTCTCCTCCCGCTCTCGCTTATCTTCGATA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGTGCGCGCTGCTCCTTCCTGCTGTGGGTGCGCCTGAAGGGGCCTGGAGTTCGTGCTCA 120
                                                                                   GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAGACACAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTGTCTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTACTACTACGTGCGCGCCTGGGTGGTGCTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGTGTGCGCGCTGCTCCTGCTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCATGGAGCCCGCCGTGTCGCTGG
                                    CCGTGTGCGCCTGCTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; !!
ilarity 100.0%; !!
Conservative 0;
                                                                                                                                  Conservative
                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNJ
/db_xref="taxon:9606"
                                                                                                                                                                                                                                         ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                           GI:10187648
                                                                                                                                                                                                                                  .4186
                                                                                                                            100.0%; 5c.
100.0%; Pr
                                                                                                                                                                                                                                                                                                               Chordata;
Primates;
                                                                                                                                 Score 400; DB 6;
Pred. No. 1.8e-67;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 400; DB 6;
Pred. No. 1.8e-67;
Mismatches 0;
                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                        DNA"
                                                                                                                                                                                                                                                                          neurological diseases
                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                       İ
                                                                                                                                                       Length 4186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 4186;
                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                            PAT 16-SEP-2000
                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                Gaps
                                    120
                                                           120
                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
BD272342
LOCUS
S
                       밁
                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                      ORIGIN
                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                     Query Match
Best Local Sim
Matches 400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
 61 CCGTGTGCGCGCTCCTTCCTGCTGGTGGGTGCGCCTGAAGGGGCTTGGAGTTCGTGCTCA 120
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                       68,
PC G01N33/53,
of diagnosing o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OS Homo sapiens (human)
PN J-202530076-A/2
PD 17-SEP-2002
PP 12-NCV-1999 JP 2000582553
PF 12-NCV-1998 EP 98121478.6
PI ROGER NITSCH, ISABELL GREEVE
PC C12N15/09, A61X38/00, A61X39/395, A61X39/395, A61X45/00, A61X48/00,
PC A61P1/00,
PC A61P1/00, A61P15/00, A61P21/00, A61P25/00, A61P25/14, A61P25/16,
PC A61P25/28,
PC A61P25/28,
PC A61P25/28,
PC A61P25/28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             degeneration
Patent: JP 2002530076-A 2 17-SEP-2002;
ROGER NITSCH,ISABELL GREEVE
OS Homo sagiens (human)
PN JP 2002530076-A/2
PD 17-SEP-2002
PD 17-SEP-2002
PF 12-NOV-1999 JP 2000582553
PF 12-NOV-1998 EP 98121478.6
PI ROGER NITSCH,ISABELL GREEVE
PC C12N15/09,A61K38/00,A61K39/395,A61K39/395,A61K45/00,A61K48/00,
                        1 GGCGCGAACCCCGCAGCGCTTACCGCCCGCGCCCGCCATGGAGCCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Butheria; Primates; Catarrhini; Hominidae;
1 (Dases 1 to 4187)
Nitsch,R. and Greeve,I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            degeneration.
BD272342
BD272342.1 GI:33082110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods of diagnosing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods of diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP 2002530076-A/2.
                                                                                h 100.0%; Score 400; DB 6; Similarity 100.0%; Pred. No. 1.8e-67; 00; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGACACACAAAAAACATCATGATCAACCTGATGGACAT 400
GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACTACTACGTGCGCGCCTGGGTGGTGCTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                           G01N33/53,G01N33/53,C12N15/00,C12N5/00,A61K37/02 iagnosing or treating neurological diseases and
                                                                                                                                                                                                                                                                                                                                                 degeneration
Key
                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                         /organism='Homo
                                                                            0;
                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1. .4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or treating neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4187 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                    sapiens (human)'
                                                                                                                           Length
                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear PAT 17-uical diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diseases and
                                                                                                                             4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-JUL-2003
                                                                                   0,
                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell
60
                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                   0
```

```
RESULT 4
AX026417
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                  δ
                                                                                                                         밁
                                                                                                                                            ð
                                                                                                                                                                     밁
                                                                                                                                                                                         ક
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
            S
                                                     á
                                                                           밁
                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                             ORIGIN
                                 밁
                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                          Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
            301
                                                                                                    181
                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                             181
                                                                                                                                                 121
                                  241
                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                      61
                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; C
Mammalia; Eutheria; P
                                                                                                                                                                                                                                                                                                                                                                          Methods of diagnosing or treating neurological Patent: EP 1002862-A 3 24-MAY-2000; NITSCH ROGER M PROF DR (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX026417 4187 bp
Sequence 3 from Patent EP1002862
AX026417
AX026417.1 GI:10187647
                                                                                                                                                                                                                                      GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCATGTGCACGGGGCCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                    CCGTGTGCGCGCTGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGGCTGGAGTTCGTGCTCA 120
                                                                                                                                                                                                                  GGGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                          TCTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG 240
                                                                                                                            TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                       TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA 180
                                                                                                                                                                       CCGTGTGCGCCTCCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAGACACAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAGACACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                               TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG 240
                                                                                                                                                                                                                                                              100.0%; Score 400; DB 6; llarity 100.0%; Pred. No. 1.8e-67; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNI
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1. 4187
                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata;
Primates;
                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                   DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                    Length 4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 16-SEP-2000
                                                                                                                                                                                                                                                               0
                                                                                                                                                                       120
                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
  RESULT 6
AX408962
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
AX334630
LOCUS
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                     δ
                                                                                                                                                           밁
                                                                                                                                                                                8
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                      361
                                                                                                                                                             301
                                                                                                                                                                                  301
                                                                                                                                                                                                          241
                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                 361
                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                      400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 51:
AX334630
AX334630.1
                                   AX408962
Sequence 1609
AX408962
                                                                                                                                                                                                                                                                                                                                                                                           _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX334630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                        AX408962.1
  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5139
                        GI:21441667
                                               from
```

```
361 AGAAGACACAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 CCTTCATGTGCACGGGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z.
Cancer gene determination and therapeutic screening using signature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: WO 0194629-A 5139 13-DEC-2001; Avalon Pharmaceuticals (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                    CCTTCATGTGCACGGGGCCCCTGGCTGGCTCACTGTCTCACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                 AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                               TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCCCCCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTGCCGCTCTCGCTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCACCAGCGCTGGGTTTCGTGTGCCTCTTCCTCCTCCTCTCCTTATCTTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGTGCGCGCTCTTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGCBAACCCGCACCCTTACCGCGCGCGCGCCCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                  AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                       AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 400; DB 6; llarity 100.0%; Pred. No. 1.8e-67; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DN/
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:18125349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4187 bp I
from Patent WO0194629.
Patent
187 bp 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                       linear
                       PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                          14-JUN-2002
                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
S
                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                    RESULT 7
AX828407
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                               ACCESSION
           ORIGIN
                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                       Вp
                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                 FEATURES
                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                        JOURNAL
                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                              AX828407
Sequence
AX828407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
                                                                                   Al-Mahmood, S., Colin, S. and Schneider, C. Genes involved in regulating angiogenesis, phapreparations containing same and applications Patent: WO 03074073-A 53 12-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alvares, C., Horne, D., Peres-da-Silva, S. and Gene expression profiles in liver cancer Patent: WO 0229103-A 1609 11-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                            Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                    Homo
                                                                                                                                                                              Нопо
                                                                                                                                                                                                   AX828407.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGCGAACCCCGCAGCGCTTACCGCCGCGCGCCCCACCATGGAGCCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                        AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                 AGCAGCGCTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGTGCGCGCTGCTCTCCTGCTGCTGGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                     CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                             TCTACTACTACGTGCGCGCCTGGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTACTACGTGCGCGCCTGGGTGGTGCTAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGTGCGCGCTGCTTCCTGCTGCTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                            AGAAGACACAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                       CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                      AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                          Signal
                                                                                                                                                                    sapiens
                                                                                                                                                                             sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOGIC INC (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                         53
                    /mol_type="unassigned
/db_xref="taxon:9606"
                                         organism="Homo sapiens"
                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="EMBL/GenBank Accession"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                         from
                                                                                                                                                                                                    GI:39838407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                         Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chordata;
Primates;
                                                                                                                                              Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 400; DB 6;
Pred. No. 1.8e-67;
                                                                                                                                                                                                                         4187 bp
WO03074073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                DNA"
                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 4187;
                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D13643"
                                                                                                           pharmaceutical
                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vockley, J.G
                                                                                                                                                                                                                                    PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                    12-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                         JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                 JOURNAL
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
HUMRSC390
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
FEATURES
                    COMMENT
                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                    TITLE
JOURNAL
                                                                                                                                                                    TITLE
                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                        DNA Res.
                                                                                                                                                                                                                                                                                                                                                                                  D13643
D13643.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                     Nomura, N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                              7584026
```

```
Submitted (11-NOV-1992) Osamu Ohara, Kazusa DNA Res 1532-3, Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:cdnainfo@kazusa.or.jp, Tel:+81-438-52-3913) On Dec 22, 1999 this sequence version replaced gi:2 Sequence updated (20-Dec-1999).
                                                                                                                                                                                                                           Nomura,N., Miyajima,N., Sazuka,T., Tanaka,A., Kawarabayas Sato,S., Nagase,T., Seki,N., Ishikawa,K. and Tabata,S. Prediction of the coding sequences of unidentified human The coding sequences of 40 new genes (KIAA0001-KIAA0040) analysis of randomly sampled cDNA clones from human immat myeloid cell line KG-1 (supplement) DNA Res. 1 (1), 47-56 (1994)
                                                                                                                3 (bases 1 to 4187)
Ohara,O., Nagase,T.,
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sato,S., Nagase,T., Seki,N., Ishikawa,K. and Tabata,S. Prediction of the coding sequences of unidentified human genes. I The coding sequences of 40 new genes (KIAA0001-KIAA0040) deduced analysis of randomly sampled cDNA clones from human immature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        myeloid cell line KG-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KIAA0018 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCATGTGCACGGGGCCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTACTACTACGTGCGCGCCTGGGTGGTGCTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTACTACTACGGCGCCCTGGGTGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCACCAGCGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGTGCGCGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGTGTGCGCCGCTCTTCCTGCTGCGCTGCGCCTGAAGGGGCCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCGCGAACCCGCAGCGCTTACCGCGCGCGCCGCCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:6630631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Miyajima, N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                        Kikuno, R. and Nomura, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4187 bp
: KIAA0018 p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 400; DB 6;
Pred. No. 1.8e-67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sazuka, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein, partial cds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tanaka, A.,
                                                                                        Kazusa DNA Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kawarabayasi,Y.,
                                                                                                                                                                                                                                                                                                                                                                      Kawarabayasi,Y.,
                       gi:285996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 06-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                     deduced
                                                                                               Institute;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                              i.
by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

٠,

```
밁
     ACCESSION
VERSION
                                                     LOCUS
DEFINITION
                                                                                   RESULT 9
BD272341
                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                δ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SdS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                   361
                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
BD272341
Methods of diagnosing c
degeneration.
BD272341
BD272341.1 GI:3308210:
                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGTGCGCGCTCCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGCGAACCCGCGCGCGCGCGCGCGCGCGCCCATGGAGCCCCGTGTCGCTGG
                                                                                                                                                                         AGAAGACACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                  AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                                                                                                                                                                                                                                                                                                          TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCCTGCACG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGTGCGCGCTGCTTCCTGCTGTGGGTGCGCCTGAAGGGGGCTGGAGTTCGTGCTCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCGCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                      AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                  CCTTCATGTGCACGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                                                                                                                                                                                                                                                  TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTGCCGCTCTCGCTTATCTTCGATA 180
                                                                                                                                                                                                                                                                                                                                                  TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / Drodein = "GALGALGA"
/ protein | d="RAA0018 protein"
/ protein | d="RAA01806.2"
/ db_xref="GI:6630632"
/ translation="REPALTARRETMEPAVSLAVCALLFLLWVRLKGLEFVLIHORW
/ translation="REPALTARRETMEPAVSLAVCALLFLLWVRLKGLEFVLIHORW
/ translation="REPALTARRETMEPAVSLAVCALLFORTOKOVREWEEGGSKTFM
/ translation="REPALTARRETMEPAVSLAVCALFORTOKOVREWEEGGSKTFM
/ translation="REPALTARRETMEPAVSLAVCALFORTOKOVREWEEGGSKTFM
/ translation="REPALTARRETMENINIMINLMDILEVDTKKQIVVEPELVTMEGGVTALLTS
IGMTLFVLFELDDLTVGGLIMGTGIESSSHKYGLFGHYGLEXUTASOGSFVRCTPSE
IGMTLFVLFELDDLTVGGLIMGTGIESSSHKYGLFGHYGLEAICAKFTHESQROEN
HFVEGLIKYSLDEAVIMTGVMTDBAEPSKLNSIGNYYKPWFFKHYENYLKTNREGLEYI
PLRHYYHRHTRSIFWELQDIIPFGNNPIFRYLFGWMVPPKISLLKLTQGETLRKLYEQ
HHVVQDMLVPWKCLQQALHTFQNNDIHVYPIMLCPFILPSQPGLVHPKGNEAELYIDIG
AYGEPRVKHFEARSCMRQLEKFVRSVHGFQMLYADCYMNREEFWEMFDGSLYHKLREK
LGCQDAFPEVYDKICKAARH"

1590...>4187

1590...>4187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="KIAA0018"
<1. .1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="KIAA0018"
/note="Start codon is not identified. ha00517 cDNA clone
for KIAA0018 has a 1-bp deletion at the position 1167 of
the sequence of KIAA0018."
/codon_start=3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="ha005171"
     GI:33082109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ._type="myoblast"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _line="KG-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 400; DB 9;
Pred. No. 1.8e-67;
); Mismatches 0;
                                                   4248 bp
r treating
                                                 DNA linear PAT neurological diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 4187;
                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
     RESULT 10
CQ776643
                                                                                                                                   밁
                                                                                                                                                             Ś
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                 გ
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                     362
                                                                                                                                                                    301
                                                                                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                   361
                                                                                                                                                                                                    302
                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _
```

```
Query Match
Best Local Sim
Matches 400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PC G01N33/53,
of diagnosing c
cell
CC degenerati
FH Key
FT source
FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROGER NITSCH, ISABELL GREEVE
OS Homo Bapiens (human)
PN JP 2002530076-A/1
PD 17-SEP-2002
PF 12-NOV-1999 JP 200058253
PF 12-NOV-1998 EP 98121478.6
PR 12-NOV-1998 EP 98121478.6
PR ROGER NITSCH, ISABELL GREEVE
PC C12N15/09, A61X38/00, A61X39/395, A61X49/395, A61X48/00, A61X48/00, A61X19/395, A61X49/395, A61X48/00, A61X19/395, A61X1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A61P43/00,C07K14/47,C07K16/18,C12N1/19,C12N1/21,C12N5/10,C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               degeneration
Patent: JP 2002530076-A 1 17-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 4248)
Nitsch,R. and Greeve,I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JP 2002530076-A/1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods of diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
AGAAGACACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                           CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTTCTCGCTTATCTTCGATA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGTGCGCGCTGCTCCTGCTGCTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                    AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                          AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGTGCGCCTCCTTCCTGCTGCTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCCATGGAGCCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTACTACTACGGCGCCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G01N33/53, G01N33/53, C12N15/00, C12N5/00, A61K37/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A61P25/28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A61P11/00, A61P15/00, A61P21/00, A61P25/00, A61P25/14, A61P25/16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism='Homo
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 400; DB 6;
100.0%; Pred. No. 1.7e-67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or treating neurological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or treating neurological diseases and cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

KEYWORDS SOURCE ORGANISM

REFERENCE

AUTHORS TITLE

JOURNAL

source

ORIGIN

LOCUS
DEFINITION
ACCESSION

VERSION

```
Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                   362
                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122
                                                                                                                                                                                                                                                                                                                      422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
    Patent: EP 1394274-A 526 03-MAR-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  _
                                                                                                                                                                                       CQ776840
Sequence 526 from Patent
CQ776840
CQ776840.1 GI:45380230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CQ776643
Sequence 329 from Pateni
CQ776643
CQ776643.1 GI:45380033
                                                            Ohtani, N., Sugita, Y., Yamaya, M., Methods of testing for bronchial
                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pulmonary disease
Patent: EP 1394274-A 329 03-MAR-2004;
Genox Research, Inc. (JP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ohtani,N., Sugita,Y., Yamaya,M., Kubo,H. Methods of testing for bronchial asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                  AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAGCGCGTGCGGGAATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGTGCGCGCTGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                              CTTCATGTGCACGGGGCCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCATGTGCACGGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCCGAACCCGCAGCGCTTACCGCGCGCGCGCCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCGCACCATGGAGCCCGCGCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccererececererrecrecrecrecececececeaecrecaecrecaecrecaecrecae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 400; DB 6; ilarity 100.0%; Pred. No. 1.7e-67; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens (human)
sapiens
 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNJ
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from Patent
                                                                                                                                                                                                                         4248 bp
: EP1394274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248 bp
EP1394274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA"
                                                            Kubo, H., Nagai, H. and Izuhara, K. asthma or chronic obstructive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kubo, H., Nagai, H. asthma or chronic
                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 4248;
                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Izuhara, K. obstructive
                                                                                                                                                                                                                                        PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12
AX026416
                     Ś
 밁
                                                          F
                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                         Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                             61
                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 CCGTGTGCGCGCTGCTTCCTGCTGTGGGTGCGCCTGAAGGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                 Methods of diagnosing or treating n
Patent: EP 1002862-A 2 24-MAY-2000;
NITSCH ROGER M PROF DR (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX026416
Sequence 2 from
AX026416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۳
                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; |
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                            AX026416.1
                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                CCGTGTGCGCGCTCTTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                          GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCACCATGGAGCCCGCCGTGTCGCTGG
                                                                              GCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCGCACCATGGAGCCCCGCCGTGTCGCTGG
 CCGTGTGCGCGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAGACACAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTACTACTACGTGCGCGCCTGGGTGGTGCTTCAAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGTGCGCCTGCTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGCGAACCCGCAGCGCTTACCGCGCGGCGCCGCCACCATGGAGCCCCGCCGTGTCGCTGG
                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 400; DB 6; ilarity 100.0%; Pred. No. 1.7e-67; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:10187646
                                                                                                                                                                                                                                                                                                                                                                                                            (human)
                                                                                                                         100.0%; Score 400; DB 6;
100.0%; Pred. No. 1.7e-67;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4248 bp
EP1002862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA"
                                                                                                                                                                                                                                                                                                              neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                   diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4248;
                                                                                                                                                                                                                                                                                                                                                               Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT
                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-SEP-2000
                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
 181
                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                            121
                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

REFERENCE AUTHORS TITLE

FEATURES

JOURNAL

KEYWORDS SOURCE ORGANISM

VERSION

RESULT 11
CQ776840
LOCUS
DEFINITION
ACCESSION

맑 á 밁 S 밁 Ś 맑 Ś 밁 S 밁 Ş 밁 Ś

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
AX828386
LOCUS
                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
   밁
                                           S
                                                                                                              밁
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                 301
                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
   362
                                                                                                                     302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                            241
                                                                                                                                                                                                                                       242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Al-Mahmood, S., Colin, S. and Schneider, C. Genes involved in regulating angiogenesis, pharmaceutical preparations containing same and applications thereof Patent: WO 03074073-A 32 12-SEP-2003; Gene Signal (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 32 from Patent
AX828386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 100.0%; Score 400; DB 6; Similarity 100.0%; Pred. No. 1.7e-67; 00; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX828386.1 GI:39838386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCGCGAACCCGCAGCGCTTACCGCGCGGCGCCACCATGGAGCCCGCCGCTGTCGCTGG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccererecececrerrecrecreses de la constant de la con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGTGTGCGCGCTGCTCCTTCCTGCTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA 120
                                 CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                                                                                                                                                                                                     TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACC
                                                                                                                                                                                                                                                                                                                                                   TCCACCAGCGCTGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA 241
                                                                                                                                                                                                                                                                                                                                                                                    TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTTCGCTATCTTCGATA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAGACACAAAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTACTACTACGTGCGCCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTCTCGCCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAAGACACACAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTCCTGCCGCTCTCGCTTATCTTCGATA
                                                                                                                                                                                                                                       TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4248 bp
WO03074073.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                  361
                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
AF261758
LOCUS
DEFINITION
                                        8
                                                                                                              밁
                                                                                                                                                                   Ś
                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 400; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                    181
                                                                                                                                                                                                                                    122
242
                                                                                                                  182
                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361 AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4248
Homo sapiens seladin-1 mRNA,
AF261758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (28-APR-2000) Center for Molecular Martinistrasse 52, Hamburg 20246, Germany Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Greeve,I., Hermans-Borgmeyer,I., Brellinger,C., Kasper,D., Gomez-Isla,T., Behl,C., Levkau,B. and Nitsch,R.M.
The human DMINUTO/DWARFI homolog seladin-1 confers resistance Alzheimer's disease-associated neurodegeneration and oxidative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 4248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Greeve, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. Neurosci. 20 (19), 7345-7352 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AF261758.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20482303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11007892
                                                                                                                                                TCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTTCCTCCTCGCTTATCTTTCGATA
                                                                                                                                                                                                                                                                  CCGTGTGCGCGCTGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                              TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                    CCGTGTGCGCGCTGCTCCTGCTGCTGGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                      GGCGCGAACCCGCAGCGCTTTACCGCGCGCGCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                    GGCGCGAACCCGCAGCGCTTACCGCGCGGCGCCGCCACCATGGAGCCCCGCCGCTGTCGCTGG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGACACAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/product="meeladin-1"
/product="meeladin-1"
/product="meeladin-1"
/product="meeladin-1"
/product="meeladin-1"
/protein_id="MAG17288.1"
/protein_id="MAG17288.1"
/db_xref="Gi:10,442025"
/translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLLPLSLIFDIYYYVRAMVVFKLSSAPRLHEQRVRDIOKQVREWKEQGSKTFMCTGRAPGWLTVSLIFDIYYYVRAMVVFKLSSAPKLHEQRVRDIOKQVROWCGVTALLTSIGWTLFVLPELDDITVGCLIMGTGIESSSHKYGLFQHTKQIVRVEDFLYTMGQVTALLTSIGWTLFVAVFMSCGTLTVGLIMGTGIESSSHKYGLFQHTKQIVRVEDFLAKYTWLRDEDFLYBLGETLRSSHKYGLEFVALDEDGTLRSGTEVTIFTRGGLEYSLDEAUNTHRSGTEVTHFRSGTEVTHRRSGTEVTHRRSGTEVTHRRSGTEVTHRRSGTEVTHRRSGTWKDABEPSKLNSIGNYKFWFFKHVENYLKTRRSGTEVTIFTRHYTFARAFTFARAFTFQNATTFQNDIHVYFWLCFFILFSQFGLVHFKGNEBLEYIDIGAYGEFRVKHFEARSCWRGLEKFVRSVHGFQMLYPMKCCLQQALHTFQNDIHVYFIMLCFFILFSQFGLVHFKGNEBLEYIDIGAYGEFRVKHFEARRSCWRGLEKFVRSVHGFQMLYADCYMNRBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGSLYHKLREKLGCQDAFPEVYDRAGNEBEFWEMFDGGSLYHKLREKLGCQDAFPEVYDRAGNEBFTURGUNGAFWANGNEBFTURGUNGAFWEMFTGGLAFYNGAFWANGNEBEFWEMFDGGSLYHKLREKLGGUNGAFWGMAGNEBFTURGUNGAFWGMAGNEBFTURGUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:9606"
/tissue_type="brain"
100. .1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
|mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:10442024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 400; DB 9;
100.0%; Pred. No. 1.7e-67;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bp mRNA
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                         180
                                                    240
                                                                                                              241
                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
```

0

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
BC011669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RS Strausberg, L. Feingold, E.A., Grouse, L.H., Derge, J.G.,
RS Strausberg, R. L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
RS Strausberg, R. D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S. F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R. F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M. F., Casavant, T.L.,
Scheetz, T. E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S. S., Loquellano, N.A., Peters, G.J.,
Abramson, R. D., Mullahy, S.J., Bosak, S. A., McEwan, P.J.,
McKerrana, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D. K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R. A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R. W., Touchman, J. W., Green, E. D.,
Dickson, M. C., Rodriguez, A. C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J. E., Jones, S. J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
10247902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
Web site: http://www.nisc.nih.gov/
Contact: nisc_mgc@nhgri.nih.gov
Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
Dietrich,N.L., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
Hansen,N., Ho,S.-L., Karlins,E., Kwong,P., Laric,P., Legaspi,R.,
Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C.,
                                                                                                                                                                                                                          CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramur
Sequencing Center (NISC),
Gaithersburg, Maryland;
                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.gov
on Aug 19, 2003 this sequence version replaced
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (30-JUL-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BC011669.2 GI:33872235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens 24-dehydrocholesterol MGC:15380 IMAGE:4130396), complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAAGACACAAAAACATCATGATCAACCTGATGGACAT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTCATGTGCACGGGGGGGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 4254)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 4254)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4254 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             reductase, mRNA (cDNA clone cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gi:15079698
                                                                                                                                                                                                                                                                                            Intramural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRI 29-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
```

```
S
                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                   밁
                                                                                                                                                          밁
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                            145
                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400;
                                                                                                                                                                                                                                                                                                                                                                   85
                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.geries: IRAL Plate: 26 Row: j Column: 2
This clone was selected for full length sequencing because it passed the following selection criteria: Similarity but not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           McDowell,J., Pearson,R., Stantripop,S., Thomas,P.J., Touchman,
Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,
Young,A., Zhang,L.-H. and Green,E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              identity to protein.
                                                                                                                                                                                                                                                                                               TCCACCAGCGCTGGGTGTTCGTGCCTCTTCCTCCTGCCGCTCTCCGCTTATCTTCGATA
                                                                                                                                                                                                                                                                                                                                                                                                CCGTGTGCGCGCTCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA 120
                                                                                                                                                                                                   TCTACTACTACGTGCGCCCTGGGTGGTGTTCAAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                     CCGTGTGCGCGCTGCTTCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCGCATGGAGCCCGCCGCTGTCGCTGG
CCTTCATGTGCACGGGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACA
                                                                                                       AGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGA
                                                                                                                                                       TCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCCTCCGCGCCTGCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGCGAACCCGCAGCGCTTACCGCGCGCGCGCCGCACCATGGAGCCCGCCGTGTCGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /protein id="AAH11669.1"

//bb xref="GI:15079699"

//db xref="GI:15079699"

//db xref="LocusID:1718"

//db xref="LocusID:1718"

//db xref="LocusID:1718"

//db xref="MIM:606418"

//translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLFLSL

//translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLFLSL

//translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLFLSL

//translation="MEPAVSLAVCALLFLLWVRLKGLEFVLIHGQSKTFMCTGREGMSULFYAVPMSC

//translation="MEPAVSLAVCALLFLLWVRLKGLEFVCTFSENSDLFYAVPMSC

DLTVGGLIMGTGIESSSHKYGLFQHICTAKGIVRADGSFVRCTFSENSDLFYAVPMSC

GTLGFLVAABIRIIPAKKYVKLRFEFVRGLEAICAKFTHESQRQENHFVEGLLYSLDE

AVINTGVMTDEAEFSKLNSIGNYKCMFFFKVENYLKTREGLEYIDTGAYGEPRVKHFEA

AVINTGVMTDEAEFSKLNSIGNYKCMFFKVENFKGNEAELYIDTGAYGEPRVKHFEA

RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWENFDGSLYHKLREKLGCQDAFPEVYD

RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWENFDGSLYHKLREKLGCQDAFPEVYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:15380 IMAGE:4130396"
/tissue_type="Brain, neuroblastoma
/clone_Tib="NIH_MGC 19"
/lab_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           product="24-dehydrocholesterol reductase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene="DHCR24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="synonyms: KIAA0018,
/db_xref="LocusID:1718"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'gene="DHCR24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               db_xref="MIM:606418"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .4254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 400; DB 9;
Pred. No. 1.7e-67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SELADIN1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 4254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Touchman, J.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84
                                                   324
                                                                                                       300
                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                          264
```

Search Job tim	Ъ	ફ
Search completed: January 31, 2005, 16:38:25 Job time : 2230.25 secs	385 AGAAGACACAAAAACATCATGATCAACCTGATGGACAT 424	361 AGAAGACACAAAAAACATCATGATCAACCTGATGGACAT 400

This Page Blank (uspto)